Integrated United Nations Management Model - A United Nations Just-In-Time Approach

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ABSTRACT

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The study was motivated by the United Nations Management Reform programme initiated in 2000 (U.N., 2000). Since then, United Nations organizations focus their spotlight on organizational changes and managerial reforms. However, in the meantime, they have also been struggling to align their management activities to the Reform programme requirements, with limited and varying levels of success. That is primarily due to the degree of complexity of the United Nations as a whole because of its institutional culture, political nature, and the global environmental pressures that the U.N. and all its agencies face today. Therefore, this study argues that United Nations Reform implies the urgency for change. However, change needs to be included as part of the strategy for it to be adequately managed. Organization's strategic management requires continuous measurement of organizational performance to serve the purpose of reform. Hence, this reform can be reviewed as a management chain of change-strategy-performance-project which can be linked to two ways: integrated and cyclical that allows the organization to improve continuously. It is in this study that all the management components are put together, an integrated view is proposed as the theoretical model, and a Just-in-Time approach is introduced to operationalize the conceptual model in the United Nations context.

The results of this study confirm strategic management positively influences in performance management, which positively influences in strategic implementation (project management) through the integration efforts. Statistically, it is well supported by our research model. The results also confirm that the efforts put to minimize the negative influence of political and institutional pressures would lead to achieving a better programme performance in United Nations organizations. Lastly, this study applies the principles of the Just-in-Time notion to United Nations integrated management model in order to achieve optimal results in efficiency and effectiveness.

DEDICATION

to
my parents, Chu-Lan Chang and Chun-Chieh Wan,
in my heart forever

Sincere thanks to
my wife, Ning Lu, children, and whole Wan's family
for their love and support

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LIST OF ABBREVIATIONS

AIC	Akaike's Information Criterion
AGFI	Adjusted Goodness of Fit
ARIS	Architecture of Integrated Information Systems
AVE	Average Variance Extracted
C4ISR	Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance
CEB	United Nations Chief Executives Board
CEO	Chief Executive Officer
CFA	Confirmatory Factor Analysis
CFI	Comparative Fit Index
CIO	Chief Information Officer
CM	Change Management
CPM	Corporate Performance Management
CR	Construct Reliability
CSFs	Critical Success Factors
DF	Degree of Freedom
DoDAF	Department of Defense Architecture Framework
ECOSOC	Economic and Social Council
E2AF	Extended Enterprise Architecture Framework
EA	Enterprise Architecture
EAF	Enterprise Architecture Framework
ECVI	Expected Cross-validation Index
EFA	Exploratory Factor Analysis
FEAF	Federal Enterprise Architecture Framework
GERAM	Generalized Enterprise Reference Architecture and Methodology
GFI	Goodness-of-Fit Index
IAEA	International Atomic Energy Agency
ICAO	International Civil Aviation Organization
ILO	International Labour Organization
IMO	International Maritime Organization

ISO	International Organization for Standardization
IT	Information Technology
ITU	International Telecommunication Union
JIT	United Nations Just-in-Time
JIU	Joint Inspection Unit
KMO	Kaiser-Meyer-Olkin
ML	Maximum Likelihood
NFI	Bentler-Bonett Index or Normed Fit Index
NGO	Non-Government Organizations
NFI	Normed Fit Index
NNFI	Non-normed Fit Index
OECD	The Organization for Economic Co-operation and Development
OGC	Office of Government Commerce
PM	Project Management
PMI	Project Management Institute
PMP	Project Management Professional
PNFI	Parsimony Normed Fit Index
PPM	Project Portfolio Management
PRINCE2	Projects in Controlled Environments, Version 2
RBM	Results-based Management
RMR	Root Mean Square Residual
RMSEA	Root Mean Square Error of Approximation
SDGs	Sustainable Development Goals
SEM	Structural Equation Modeling
SM	Strategic Management
SRCs	Standardized Residual Covariances
SRMR	Standardized Root Mean Square Residual
TLI	Tucker–Lewis Index
TOC	Theory of Change
TOGAF	The Open Group Architecture Framework

CHAPTER 1 INTRODUCTION

The United Nations (U.N.) management reform programme initiated in 2000 (U.N., 2000) motivated this study. Since then, U.N. organizations have been struggling to align their strategies and operations to the reform programme requirements, with limited and varying levels of success. That is primarily due to the two types (U.N. Common System and U.N. Specialized Agencies) of U.N. organizations, the level of complexity of the U.N. as a whole due to its political nature, and the global environmental pressures that the U.N. and all its organizations face today. Reform implies the urgency for change. Change needs to be included as part of the strategy for it to be adequately managed. Organization's strategic management requires continuous measurement of organizational performance to serve the purpose of reform. This reform can be reviewed as a chain of change-strategy-performance-project which can be linked to two ways: integrated - whereby alignment is necessary and done through the notion of enterprise architecture; and cyclical - which requires repetition that allows the organization to improve continuously. It is in this study that all the pieces are put together, an integrated view is proposed as the theoretical model, and a Just-in-Time approach is introduced to operationalize the conceptual model in the U.N. context.

In chapter three, all relevant management theories underpinning the present work are reviewed. The challenges of the management theories can only be appreciated in this study within the context of the U.N. Therefore, the U.N. context is introduced in this chapter and detailed in chapter two. Management theories related to U.N. Reform is invoked in the discussions, in this section. The importance of this study identifying contribution to the body of knowledge is discussed, thereby positioning the work completed within a U.N. change management framework. This chapter concludes with an overview of the research methodology, findings, and dissertation structure.

1.1 The Case of Integration for U.N. Reform

The theoretical underpinning of the present research model involves primarily integrating three management disciplines, namely strategic management, performance management, and project management.

It is commonly agreed that the strategy development process is likely to be multifaceted (Derkinderen and Crum, 1988; Eisenhardt and Zbaracki, 1992; Fredrickson, 1983) while there is a growing recognition of the limitations of normative explanations of the strategic management process. An area of growing importance in strategy process research has been the conceptual development of more integrated frameworks accomplished only theoretically (e.g. Chaffee, 1985; Eisenhardt and Zbaracki, 1992; Hart, 1992; Mintzberg, 1990). Researchers have employed explanatory dimensions of the strategy development process to demonstrate that through the use of an integrated framework a clearer understanding of the strategy planning and development process and its complexity can be achieved. Much of those studies, however, must be qualified by the situation in which the strategy development process has been explored: the industry sector (Nutt, 1984), a concentration of a particular type of strategic issue (Shrivastava and Grant, 1985), or reliance on only one respondent per organization as the source for understanding the process (Hart and Banbury, 1994). *Nonetheless, everybody agrees on the value of exploring strategy development processes through integrated multiple frameworks.*

To that effect, the present research is built on an integrated conceptual model beginning with strategic planning and strategic development components, based on Bailey et al. (2000) multidimensional model, which is also a sector-independent theory. The theory incorporates views of power, incrementalism, culture, and planning schools argues that strategy development is an analytical process (Ansoff, 1965), a process of influence between internal interest groups (Pfeffer and Salancik, 1978), a process directed by the cultural and cognitive aspects of the organization and its members (Johnson, 1987), a process directed by a powerful individual and their desires for the organization's future state (Bourgeois and Brodwin, 1984), and a result of prescriptive external pressures limiting the organization's ability to determine its strategies (Hannan and Freeman, 1989). This relatively holistic strategic model view fits the U.N. environment, theoretically.

While some strategy theorists advocate integration, the second component of this integration involves performance measurement which has become common in management theory. All U.N. organizations with no exceptions have widely adopted an integrated performance management to systematically monitor, evaluate, and improve on its programme outputs, outcomes and results (such as UNDP, 2004). This performance management is derived from the results-based management approach widely used by governments and international development projects.

The research model used in this study of results-based management is grounded on a current empirical approach that the U.N. has adopted. This model comprises six distinct dimensions, interrelated with two strategic management components, i.e. strategic management process in Bailey et al. (2000) and project management (Saadé and Wan, 2015 and 2017). This theory-based model argues that performance systems stress the importance of leadership and influence of organizational culture. An OECD 2005 survey (Curristine, 2005b) of U.N. member countries confirmed that the most important factor cited to explain success in performance management systems is strong leadership. This model focuses on programme management framework and pay more attention to managing and monitoring programme outcome results. Monitoring is an important factor in the life of a programme or project. It involves regular and systematic assessment based on participation, reflection, feedback, data collection, analysis of actual performance (using indicators) and regular reporting. Like all management systems for planning, as monitoring and evaluation become more results based, adequate data collection becomes the more important. This continual process of feedback and adjustment seeks to make programmes more responsive to the environment within which they operate. Also, there is no doubt that accountability is essential to the success of a performance management system. Therefore, how a performance management system is implemented in an organization is critical to its success.

The final component of the integrated conceptual model proposed herein is that of project management, which is based on Saadé and Wan (2015). Their work was related to critical success factors in project management in the same context of this study. Their research was based on Pinto and Prescott (1988) and Hyvari (2006). The results of their study were utilized herein, providing the present integrated conceptual model the opportunity to address the factors of interest, namely at the project level (operational) (Pinto and Slevin, 1987) and the organizational level (Hyvari, 2006).

Although strategic planning, results-based performance management, and project management are utilized in many U.N. organizations, they are often carried out separately by different offices. In this silo-based management, hardly any alignment occurs, if any at all. As a result, the effectiveness of such silo approach often introduces conflict in strategic direction and competing for management practices with tremendous resource redundancy and associated

inefficiencies. *This is at the core of what the integrated management model studied herein attempts to address.*

1.2 Overview of Research Context: the United Nations Organizations

The United Nations, as the premier multilateral political entity, has been asked by its member-states: (1) to carry out a series of necessary institutional changes for efficiency and effectiveness and (2) to uphold its relevance in today's global affairs. These demands are at all times on the U.N.'s main agenda. U.N. agencies repeatedly dispute over the scope, appropriateness, and effectiveness of initiatives, each presenting their view to the appropriate management approach. However, U.N. member-states disagree on the necessity of some proposed reform initiatives and the way to realize them. Understandably, this can be interpreted from the power school-of-thought viewpoint. With that notion of '*power*' politics, it is clear that using the U.N. context as a backdrop to this study, we should realize that the process of institutional change at the United Nations must work in subtle, complex, and uneven ways.

Similar to body sculpting exercises, the final success of business transformation is not easily realized, and cannot occur without pain. The U.N. system, in this case, is probably an extreme case. A number of occurrences that have appeared in the United Nations would unlikely be witnessed in other sectors. The phenomena of institutional reform and subsequent adaptation (Vis a Vis efficiency and effectiveness) in the U.N. system has rarely been studied. Any published research in that respect is superficial and descriptive in nature. Some reports commissioned by the various U.N. organization have been produced, but they were done for internal purposes and are not of a scientific nature.

The character of the U.N. can provide a picture reflecting those problems: the Secretary-General has little weight over the overall strategic position and decision, political agendas drive the system, and member-states are seldom in agreement with specific reform goals that would hardly ever occur in the public and private sectors. As a result, any number of reform initiatives have been flushed away by endless disputes and contentions. The champions are often running short of patience, political capital, or simply drained of personal interest to witness the painful process going through to the end. Yet, the process of reform is still a regular item on the U.N.

agenda, to show off organization's efforts for change. Big waves of high visibility initiatives may only come every five to seven years (the more recent one is the Sustainable Development Goals for 2030), but less publicized and less contentious tinkering closer to the surface never seems to cease. In the United Nations, at times, claiming the importance of results-based process is crucial to the reform. However, process evidently seems more important than results, while at other times the process is the desired result.

Those unaware of the history of reform may indeed be destined to repeat it. Since conditions change, it may make sense to test the water now and again with similar proposals that have been on the agenda numerous times before. Nevertheless, a lot of time and aggravation can be saved simply by learning from history first, especially because the United Nations is such a precedent-dependent institution. The temptation to mistake modest and short-term adjustments for epochal change has proven irresistible repeatedly. Unfortunately, such repeated overselling of reform accomplishments has tended to undermine the progress in strategic management, and eventually introduced undesirable impact on the programme implementation in the field. The results from such chained consequences, then, backfired to member-states, who were the ones asking for U.N. Reform initially. That has led to overly high expectations leading to the disillusionment of the whole enterprise. Consequently, encouraging proposals that squeeze out sound but incremental initiatives have been observed. After decades of repeated events, voices are being heard from both the Secretariat and the governing body (states) asking for revisiting all reform matters. Therefore, more studies are urgently needed from both academicians as well as U.N. practitioners to re-examine the theoretical models such as '*Theory of Change*' used in the current management process with some expectation on how we could improve existing frameworks for meeting increased needs from member-states and the prospects of a global society.

As a response to the above (the U.N. Reform is facing today and, the service mandated by member-states), the integrated view of a multidisciplinary management model was analyzed in this study. It is commonly agreed that the notion of integration is the alignment of strategy, operations, and continuous improvement processes that could bring efficiency to U.N. organizations. By doing so, it means that different departments and levels speak the same language and are tuned to the same wavelength (Garvin, 1991). As a viable approach for achieving business objectives in terms of cost reduction, corporate managers often pursue efficient utilization of resources, the greater

motivation of employees, better compliance with social obligations, and meeting requirements of stakeholders. Thus, identification of influential factors for integration management in the strategic planning process, development, its implementation and continuous improvement is a matter of interest for academicians and practitioners. Paradoxically, literature on this subject is scarce and is limited to within certain disciplines.

A review of the literature in relation to integrated management systems have been discussed as the merger of quality management systems, environmental management systems, health & safety management systems, and corporate social responsibilities. None was found in relation to the U.N. system making this study more important. Indeed, to thrive in a period of big waves, a U.N. organization needs to look at every aspect of their processes, including cost efficiency, capturing opportunity, and creating value. At the same time, it should also wisely cope with the changing political nature of the working environment and mitigate any impact of organizational operations on the global community. Moreover, U.N. organizations cannot neglect but should actively address the Just-in-Time services and missions requested by the member-states while continuing to improve their operations.

1.3 Overview of Methodology

It is worth to providing a brief summary of the research methodology followed in this study. This research reviewed the relevant literature on change management, strategic management, performance management, and project management, to clearly define the concepts under investigation. Based on the gaps identified in the literature this study developed a conceptual framework with thirteen relationships among the areas identified. This study also investigated, two mediating, and three restricted relationships.

Data were collected following a survey methodology approach. A pilot and trial run of the Survey was carried out in one of the U.N. specialized agencies. The Survey was then uploaded on Qualtrics (an online survey tool) and in all cases directly emailed to the target respondents including C-level U.N. senior manager, and operational managers in the ten U.N. organizations. A quantitative approach using exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) to examine the model constructs were used, and a SEM approach was followed to test the relationships in the integrated management model.

1.4 Research Findings

1. Results from strategic management model analysis show that political pressure has a significant negative influence on U.N. strategic planning and, at the same time, institutional pressure, such as culture and organization history, has a negative relationship with strategic development.
2. However, this same model shows that power pressures from top management and external political bodies do not have any substantial influence on organization's culture and their way of doing business.
3. Regarding the result-based management model, it is evident that organization capacity has a strong influence on programme focus, which may consequently increase positive effect to performance efficiency.
4. Clear accountability and role were shown to also contribute in the same way to performance efficiency.
5. Given the project management model, statistical analysis indicates that project manager competence can improve project environment, which can promote project efficiency for a better overall performance.
6. This research scrutinizes the integration effects between strategic management and results-based management and between results-based management and project management. The results show strong support for the existence of such integration effects.
7. Research results also illustrate the importance of results-based performance management (performance efficiency) in mediating the positive impact on project management (project efficiency) by strategic development. Further analysis could not find other integration relationships among the other constructs.
8. A simulation was performed to test the mediation effect between strategic management constructs. The results show that significant integration influence does exist.
9. Similarly, the study verified mediation effect between results-based management constructs in the performance management model (capacity and performance efficiency). However, evidence of such effect between the constructs was not detected.
10. Identified integration effects to three restricted models were compared. Findings show that effect only exists while both integration relationships are presented between the three models. All restricted models were rejected.

The findings from this study are significant for U.N. top management, management practitioners, and academicians since they offer a theoretical basis for improving the current management schools-of-thought and for delivering Just-in-Time services based on the U.N. context. Therefore, instead of implementing each management practice in isolation, this study proposes an integrated approach to improving the optimal performance in U.N. organizations, to meet their reform requirement.

1.5 Research Contributions

Hence, the motivation behind this study is to respond to the urgent needs expressed by member-states. First, this study examined the management models, independently (namely change management, strategic management, results-based performance management, and project management) to validate their constructs in the U.N. context. This validation process allows us to identify the influential factors affecting the U.N. organization's reform environment. The results would help theorists to work towards an integrated conceptual or theoretical model. Also, this understanding could contribute to the literature that fosters future management planning, development, and implementation studies, allowing researchers and U.N. practitioners to have a better understanding of the characteristics of multidisciplinary management thought and its application in the context of international organizations.

Secondly, the resulting validated constructs (performed independently) are then united together to establish a U.N. Integrated Management Model (UNIMM). The final UNIMM would identify the consolidated set of factors and their relationships showing their alignment across the organizational strategy-performance-project layers. U.N. is not a research organization, and it requires a practical approach for the use of UNIMM. A framework facilitates this practical approach. Having the UNIMM validated, a framework by which it can be operationalized becomes necessary. We accomplish this by arguing that integration efforts alone are not enough to achieve optimal results; in that, the ideal framework should address cutting excess waste (inefficiency), and capture and create value, during the processes of the UNIMM implementation. Consequently, the notion of Just-in-Time (JIT) approach borrowed from the manufacturing sector is introduced and

examined. In this endeavor, a broad definition of Just-in-Time model suitable for U.N. agencies is proposed.

By developing the UNIMM and incorporating it with the JIT approach, a continuous improvement and change management framework is established. The ultimate goal of this context is to address the challenges in on-going U.N. budget exercises (shortage), Just-in-Time services expected by member-states (efficiency and effectiveness), and maintaining interdependence to the global society (relevancy).

As mentioned earlier, this study was motivated by the U.N. reform agenda adopted in 2005. Since then, all U.N. organizations have been struggling to implement the reform requirements. Due to the highly complex nature of the U.N. organizations, research has little to offer in terms of effective guidance as available management theories and models are discipline-isolated-based (strategy, performance, project) and have been formulated for sectors that are much less complicated (and less politically oriented). The work carried out in this study makes important contributions to the body of knowledge. At the same time, and while performing the research work, secondary (but not of lesser importance) contributions were made. They are listed as follows:

Primary

1. Formulation of two integrated conceptual management models:
    a. Enterprise Architecture-based
    b. Cyclical-based
2. Validation of individual management theoretical constructs to the U.N. context (independent):
    a. Change management
    b. Strategic management
    c. Performance management
    d. Project management
3. Investigation of relationships between the U.N. management model factors (independent):
    a. Change management
    b. Strategic management
    c. Performance management

    d. Project management
4. Formulation of a U.N. Integrated Management Model (strategy-performance-project)
5. Development of a framework for U.N. practitioners to realize reform in a more systematic, consistent and predictable way:
    a. Incorporation of enterprise architecture as the method for alignment
    b. Utilization of Just-in-Time method as the central control mechanism to initiate next increment change cycle [measurement, data analysis, adjustment]
6. Exploration of mediation effects across strategy-performance-project management

Secondary

1. Interpretation of the management theoretical models into the U.N. context
2. Linking the U.N. reform from a theoretical perspective
3. Adaptation to a definition of management theoretical models to the U.N. context:
    a. Change management
    b. Strategic management
    c. Performance management
    d. Project management
4. Just-in-Time reconceptualization for management
5. Testing the extent of integration of the UNIMM

1.6 Dissertation Structure

This study is organized into eight chapters as following:

Following chapter 1, the introduction, the second chapter provides an introduction to the U.N. organization context and elaborates on its political nature and its relevance to its global position. It provides justification on why the U.N. context was chosen for this study. A background is provided in detail, with some discussion of their current management practices. Subsequently, the relevance of the management challenges is also expanded.

The third chapter includes a literature review carried out under this study. It provides a detailed discussion of relevant theoretical foundations and associated management practices in U.N.

organizations. Accordingly, the gaps in the literature are identified and presented, and contextualized to the U.N.

Chapter 4 illustrates the conceptual research model derived from management theories and posits the research questions to be investigated. The conceptual research model builds on the literature review carried outlined in the previous chapter. By drawing on management literature, the research questions are formulated and expanded to explore not only direct relationships but possible mediating relationships as well.

Chapter 5 describes the research methodology undertaken. The requirements and constraints in designing the sushowing itsrvey, and how the research constructs were operationalized. Additionally, a section is provided to explain how the questionnaire was designed and administered (online Qualtrics). Lastly, a section is presented to describe the survey sample and the approach to data analysis (EFA and CFA).

Chapter 6 presents the result of the data analysis with the discussion in the U.N. context. Initially, this chapter explains the treatment of data, (data collected, managed and prepared for the initial descriptive analysis). It also provides a discussion on the reliability and validity of the data, before the actual inferential analysis is done. Lastly, data findings are conceptualized and discussed within the U.N. context.

Chapter 7 proposes a broad definition of the Just-in-Time approach and combines it with the research model. It makes a case for the Just-in-Time approach as the control mechanism for the enterprise UNIMM to be utilized in a continuous improvement change management cycle.

Chapter 8 concludes the results and outcomes of the research analysis. This chapter underlines the research theoretical and managerial contribution, and presents a section on the research limitations and recommendations on the direction for future studies.

CHAPTER 2 THE UNITED NATIONS ORGANIZATIONS

Since this study contributes to the relatively limited research in relation to the vital global role of the United Nations, I believe it to be necessary to elaborate on its context. This would provide the reader with a better appreciation of the structures, politics, history and environment in general, showing its complexities and the challenges in studying it.

At its founding on 24 October 1945, the U.N. set its primary goal to promote international co-operation, in particular with a focus on global safety and security and with the aim to prevent global conflict. The general understanding is that the U.N. is an international organization and a political body. In fact, the U.N. is a '*family*' of international organizations with more than 180,000 employees coming from various sectors including governments, industries, non-governmental organizations, and academia. The U.N. currently has 193 member-states. The headquarters of the United Nations is in Manhattan, New York City. Some other U.N. organizations headquarters are, for examples, International Telecommunication Union (ITU), World Health Organization (WHO), International Labour Organization (ILO) and World Intellectual Property Organization (WIPO) are in Geneva, International Maritime Organization (IMO) is in London, the United Nations Office for Project Services (UNOPS) is in Copenhagen, the United Nations Environment Programme (UNEP) is in Nairobi, International Atomic Energy Agency (IAEA), the United Nations office on Drugs and Crime (UNODC) and United Nations Industrial Development Organization (UNIDO) are in Vienna, Austria, and some other cities around the world. U.N. organizations are financed through member-states' assessments, voluntary contributions, such as in-kind contributions, and resource mobilization such as fundraising activities. Its mandates include maintaining international peacekeeping and global security, protecting human rights, promoting the green climate, cultivating social and economic development, and supplying humanitarian aid in cases of famine, natural disaster, and armed conflict. The U.N. family also includes specialized agencies such as WHO, IMO, IAEA, and ITU. The U.N.'s most senior (prominent) officer is the Secretary-General.

Nowadays, the U.N. has six principal organs: the General Assembly, the Security Council, the Economic and Social Council (ECOSOC), the Secretariat, the International Court of Justice, and the United Nations Trusteeship Council. The U.N. Charter stipulates that each principal organ of the U.N. can establish various specialized agencies to fulfill its duties. Other international

organizations, e.g. The Organization for Economic Co-operation and Development (OECD), may be granted consultative status to participate in the U.N.'s work. U.N. performs its humanitarian agenda through its U.N. Common system. Some examples include the avoidance of famine and malnutrition through the work of the World Food Programme (WFP), mass disease-prevention programs such as through WHO, and the protection of vulnerable and displaced people by United Nations High Commissioner for Refugees (UNHCR).

2.1 U.N. Management Reform Efforts and Change Agenda

One of the hallmarks of Kofi Annan's tenure as Secretary-General of the U.N. was *reform*. Following his appointment in 1997, Mr. Annan initiated key internal reform measures to modernize the U.N.'s leadership, management structures and practices. His 1997 reform package included the creation of the deputy secretary-general post, the four executive committees, the Senior Management Group, and the Strategic Planning Unit. Other changes included instituting results-based budgeting; consolidating U.N. offices and bringing more coherence to country activities. In 2004, Annan decided that he would propose a comprehensive U.N. reform agenda for adoption by member-states at the World Summit in September 2005. Hence, in September 2005, chief representatives of member-states met for the World Summit at the U.N. Headquarters in New York City to strengthen the U.N. through organizational reform (Blanchfield, 2015). The resulting Summit Outcome Document laid the groundwork for a series of reforms that included enhancing U.N. management structures, strengthening the U.N. Security Council, improving the U.N. system of coordination and coherence, and creating a new Human Rights Council. Later, U.N. member-states worked together toward implementing these reforms with varied results. Some organizational changes, such as improving system-wide coherence, are completed and ongoing. Others reforms, such as Security Council enlargement and changes to management structures and processes, have stalled or have not been addressed (Genderen, 2015).

It is evident that, in 1997, significant institutional changes (including governance structures, roles and functions, and organizational structures) were introduced at the U.N. headquarters. These changes not only impact on the headquarters but on all the U.N. core and specialized agencies. Everyone was expected to adapt and re-align their operations, tactics, and strategies in the U.N. This is a highly complex task by any standards and one which requires in-depth knowledge in

change management in the primarily political context of the United Nations. Considering this, in the following sections, I bring forward the challenges that the U.N. agencies were facing (and continue today) due to this reform for efficiency and effectiveness, the notion of change as it has evolved with these organizations, and the drivers for change. I complete this section with an analysis of the U.N. functions as a system with an attempt to bring everything together.

2.1.1 Challenges of U.N. reform

U.N. reform for efficiency and effectiveness to uphold its relevance in today's global affairs are at all times on the main agenda. Blanchfield (2015) indicated in her United Nations Reforms Report to the United States Congress and emphasized that one of the key challenges facing reform advocates in the U.N. is to find common ground among different definitions of the reform, held by various the stakeholders. In the meantime, there is no common understanding of the notion of '*U.N. Reform'*, due to different business-foci among the various U.N. organizations especially in the specialized agencies. Because of that, there are repeated disputes over the scope, appropriateness, and effectiveness of past and current initiatives, and different ways of thinking in preparing a strategy for the future. Thus, it is understandable that, under various hats, U.N. member-states often disagree with each other on whether some proposed reform initiatives are necessary, and how to most effectively realize them.

It was not surprising when a number of U.N. specialized agencies came up with political justification for not conforming (to certain degrees) with the reform initiative. As an example, developed countries supported the delegating of more authority to the Secretary-General to implement management reforms, whereas developing countries were concerned that giving the Secretary-General more power may undermine the control of the U.N. General Assembly. Therefore, under such circumstances, the influence of individual countries becomes irrelevant. It is not uncommon that this kind of tension in trust still exists in U.N. organizations today.

2.1.2 Managing change

In January 2016, a proposed '*Theory of Change*' on how the U.N. Development System (UNDS) can best support the implementation of the 2030 Agenda for Sustainable Development was developed and endorsed in response to this call (UNDS, 2016). The essential hypothesis

underpinning the U.N. '*Theory of Change*' presented, is to support the implementation of a transformative 2030 Agenda efficiently and to meet the expectations of member-states. The UNDS must perform efficiently '*function as a system*' in a coherent and integrated manner at various levels. Continuing in the improvement of '*functioning as a system*' is a requirement for continued relevance, better strategic positioning, and strengthening of the delivery of results and associated impacts.

In the final Outcome document of the 2030 Agenda for Sustainable Development (U.N., 2012) cited that '*if U.N. Agencies, Funds, and Programmes focus only on their mandates and priorities, and not on how the UNDS can really maximize synergies at all levels or do not sufficiently consider how individual entity contributions affect implementation of all SDG goals and targets, the goals of U.N. will be less likely to be achieved*' (UNDS, 2016). At the same time, it is important to determine when it is most critical that the UNDS *'functions as a system'* and when it is not. Particularly, where the Sustainable Development Goals (SDGs) constitute the '*WHAT*' that the UNDS will need to help to deliver, this '*Theory of Change*' focuses on the '*HOW,*' stressing that if the UNDS is to be more '*fit for purpose,*' change efforts must be much more purpose driven. The proposed '*Theory of Change*' is, therefore, focused on how the UNDS can best collectively support delivery of the SDGs. The effort takes as its primary focus the UNDS to give further deliberation developing a theory of change across the pillars of the U.N. system. Nevertheless, without a commonly acceptable visionary and definition in Change, the challenge still stands the same (Hendra and FitzGerald, 2016).

What exactly then is the U.N.'s theory of change? Rogers (2014) '*theory of change*,' explains how activities are understood to produce a series of results that contribute to achieving the ultimate intended impacts. It can be developed for any level of intervention – an event, a project, a programme, policy, a strategy or an organization. A theory of change can be developed for an intervention:

- Where objectives and activities can be identified and tightly planned beforehand, or
- Objectives that change and adapt in response to emerging issues and decisions made by partners and other stakeholders.

When planning an impact assessment and developing the terms of reference, any existing theory of change for the programme or policy should be reviewed for appropriateness, comprehensiveness, and accuracy, and revised as necessary. It should continue to be revised over the course of the evaluation, either identify the intervention itself or the understanding of how it works – or is intended to work – change (see Figure 1).

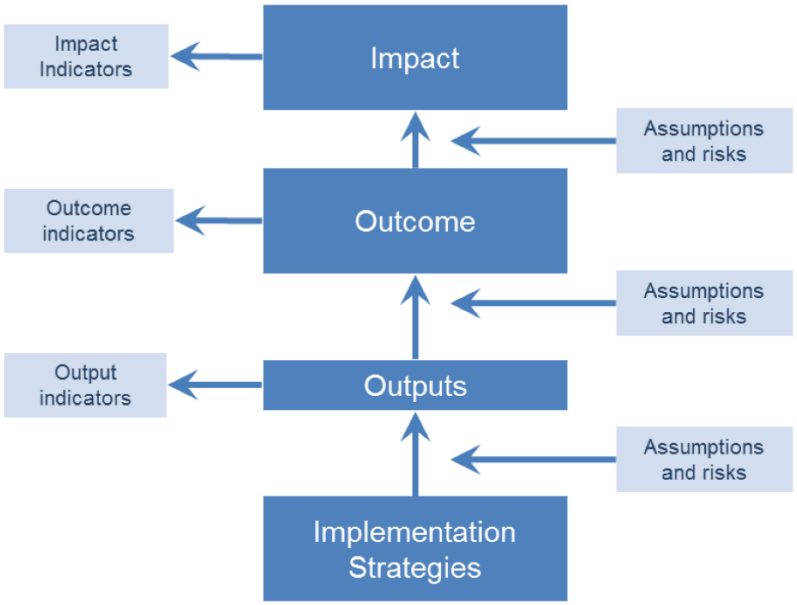


Figure 1: Schematic depiction of a Theory of Change (source: UNICEF, 2014)

2.1.3 Drivers for change

The past and current U.N. transformative efforts, including the *'Delivering as One,'* introduced by U.N. Secretary-General Kofi Annan in 1997, initiative contain sustaining assumptions about how change happens in UNDS and how best to achieve it (UNDS, 2016). Time and again previous reform initiatives have only been, somewhat implemented, where the results were difficult to provide an assessment of success and impact. The U.N. believes that lessons learned from these efforts can help the design of reform initiatives, including the need to implement reform packages to maximize impact and results. This ensures that change efforts are strategically focused and well sequenced. The appropriate instruments, the objectives and key success indicators for measuring progress are in place while still allowing for flexibility and experimentation.

Thus, the U.N. Assembly Resolution (U.N., 2012), and its Outcome document of the United Nations Conference on Sustainable Development, entitled '*The future we want,*' inter alia, set out a mandate to develop a set of global SDGs for consideration and appropriate action by the General Assembly at its sixty-eighth session. It also provided the basis for their conceptualization. The Outcome document gave the mandate that the SDGs should be coherent and integrated into the United Nations development agenda beyond 2015. Hence, (U.N., 2015b) the U.N. Assembly Resolution set its 2030 Agenda for SDGs, and member-states highlighted the role of the U.N. system in supporting the implementation of the SDGs. Specifically, they underlined '*the important role and comparative advantage of an adequately resourced, relevant, coherent, efficient and effective U.N. system in supporting the achievement of the SDGs and sustainable development'* (U.N., 2015b). Member-states also stressed '*the importance of system-wide strategic planning, implementation, and reporting to ensure coherent and integrated support to the implementation of the new Agenda by the United Nations development system*' (U.N. ECOSOC, 2016a).

To all U.N. organizations, the SDGs and the 2030 Agenda are of themselves a change project. It is a significant change management effort stressed not only by the U.N. system but also by all stakeholders including all sectors, civil society and the international community as a whole (U.N. ECOSOC, 2016b). The UNDS will need to invest in and ensure, strong leadership for the change and to ensure a U.N. system-wide response at the national, regional and global level (UNDS, 2016). The ECOSOC Member State dialogue also expressed its view on the '*longer-term positioning of the U.N. Development System*,' is the need for a robust and shared '*theory of change*' that can be more *'fit for purpose.'* Such a theory of change will be substantial not only to measure progress, to assess impact, and to validate the results but also to guide change efforts going forward (U.N. ECOSOC, 2016a).

2.1.4 Functioning as a system

In light of the above, the U.N. is best understood as a complex system that is non-linear, interlinked and interdependent, and that approaches to change across various U.N. agencies are much more diversified, flexible and decentralized (UNDS, 2016). Thus, creating space for fostering experimentation and innovation are key, and central to facilitate strategic alignment within the UNDS in support of the SDGs at all levels (Hendra and FitzGerald, 2016). There is a shared sense

that in such a complex system, change is as often haphazard and accidental as it is deliberate and designed. Furthermore, U.N. Reform is not only a technocratic process but is dependent on the balance between political will and commitment of the member-states and of the U.N. system itself. Therefore, efforts to ensure greater coherence and integration in support of SDGs implementation are already underway in many sectors. For example, individual governments are setting up national coordination mechanisms for sustainable development and considering how best to ensure 'whole of government' responses to the SDGs.

The OECD's '*Fit for the Future*' initiative is looking at the core capabilities that Development Assistance Committee members will need to deliver effective development cooperation, as well as how best to adapt to the SDGs (OECD, 2016). The World Bank Group (2015) has set out its approach to the 2030 Agenda, in a September 2015 paper, which highlights where the Bank intends to contribute, based on its comparative advantages. Global partnerships such as Every Woman Every Child are also repositioning in light of the SDGs, with new partners, investments, and financing mechanisms. Moreover, FHI 360 (2011), Family Health International is a nonprofit human development organization, stresses that the '*Integrated Development*' initiative highlights the importance of leveraging interdependencies and addressing complex problems at a systems level in the context of the 2030 Agenda. The UNDS can benefit from these approaches, including efforts to better measure results of integrated initiatives and show whether and when integration and collaboration offer added value – and when it does not (UNDS, 2016).

Convincingly, against this backdrop, proposed efforts for a '*Theory of Change*' for UNDS (2016) reform towards improved '*functioning as a system*' for relevance, strategic positioning, and results have been formulated in the U.N. organizations. Deliberately, it is imperative to embrace complexity, promote integration and coherence while also leveraging the rich diversity of the UNDS, and advance both systemic change and experimentation at the same time. Given the central importance of member-states in driving and supporting change, the UNDG will also need to continue to invest in joint advocacy with member-states to provide consistent and coherent guidance and financing of the UNDS going forward.

2.2 U.N. Strategic Planning

In the U.N. system, the past decades has seen the notion of strategic planning continuously evolving through different paradigms. It also varied within the type of U.N. organization. However, there does not seem to be a unified definition, across the various U.N. agencies, of what exactly strategic planning intends to achieve. For an organization to establish a strategic plan, it has to have a clear vision of what it wants to achieve, for what purpose and how. These questions may seem to be simple enough, but in the complex environment of the U.N. system where different U.N. organizations address cross-cutting issues, they are tough to come to terms with. Still today, it is a challenge to analyze what exactly is expected of a strategic plan, what it will cover, what processes and tools will support it, and how its implementation and effective achievement will be measured and monitored.

2.2.1 Defining strategic planning for the U.N.

Due to its compounded and decentralized nature of the system, the diverse areas of activity, and various pathways for decision making, thus, coordinating centralized strategic goals remains an unsolved challenge for the U.N. Before 2005, strategic planning was far outside the U.N. sector's main focus, and was not accepted (or dealt with) inside the U.N. Chief Executives Board (CEB), a group of top executives from U.N. organizations. Nevertheless, they are seen to have adopted some existing strategic planning practices. Accordingly, a concise definition of the U.N. Secretariat strategic planning was devised as follows (Inomata, 2012):

'*Strategic planning is the process by which an organization's medium- to long-term goals, as well as the resources, plans to achieve them, are defined*.'

Likewise, the second largest U.N. organization, U.N. Development Programme (UNDP) has its view based on practical experience in the development programmes, accepted by most of U.N. agencies (UNDP, 2010). From its perspective, the aim of strategic planning is to establish definitively the nature and character of an organization and the sector that it represents and to manage its future development. Within the strategic planning process, an agency establishes its goals, priorities, and strategies, and defines the needed measures to evaluate the success of these aims. Consequently, a strategic plan represents an integrated set of strategic goals and operational

objectives and activities required to achieve the desired result, often defined as an organization's '*mission*' or '*vision.*' Hence, UNDP (2009) defines its strategic planning as following:

'*Strategic planning is a disciplined effort aimed at the adoption of basic decisions and the undertaking of core activities that form and lead an organization in what it does and defines the reasons for what it does focus on the future.'*

The U.N. audit and inspection body, United Nations Joint Inspection Unit (JIU), adopts the same definition as CEB, which is with attention on the process and procedure (Inomata, 2012). According to World Bank, its definition is more emphasized on leaders` vision and organizational goals to achieve results benefiting the future as follows (World Bank, 2013):

'*The process by which leaders of an organization determines what it intends to be in the future and how it will get there. To put it another way, they develop a vision for the organization's future and determine the pressing priorities, procedures, and operations (strategies) to achieve that vision*.'

In facing with both external force and internal institution pressures, U.N. agencies pay consistent attention to planning and adjusting their strategy. U.N. organizations, furthermore, need to quickly re-position themselves to maintain their business operations and mandate, relevant to the changes in the external environment and internal context. Hence, member-states, with high expectations, mandate the U.N. to operate more efficiently and more in line, with demands of changes, such as the addition of the U.N. values, whereas, at the same time, being agile but stable in building core capability to achieve global goals. It is evident from the above that a generic planning framework will not meet the expectations of most of the U.N. agencies. It seems that every U.N. agency will require to develop and adapt its own customized strategic planning programme. Hence, the subject of this study and which will be dealt with in more detail in the following sections.

2.2.2 Strategic planning framework

The unified management model adopted today in U.N. offices derives its roots from multiple management tools and techniques that have evolved over the past 80 years. It draws on

components from quality management practices originating in the 1930s, during a time when new practices were proliferating by Deming, W. (1993) and originated from the Japanese industrial quality movement, Walter Shewhart (1939) who believed that lack of information greatly hampered the efforts of control and management processes in a production environment. To aid a manager in making accurate, efficient, economical decisions, he developed Statistical Process Control methods and promoted the quality management movement (Joseph Juran, 1951). Other more recent influences include Lean Six Sigma, the branded approach made famous by Motorola and Allied Signal, that aligns customer needs with product and service delivery, as well as improves efficiency and effectiveness by reducing re-work, wait times and mistakes. Drs. Robert Kaplan and David Norton (1996) as a performance measurement framework introduced the balanced scorecard model and its evolution into strategy mapping in the 2000's. Later, Kaplan, R. and Norton, D. (2000) developed the logic model approach, and nowadays, it has become most well known in NGOs, non-profit and government sectors which help to align inputs, processes, outputs and outcomes; and project and portfolio management approaches (U.N., 2015).

Grounded in the unified model, today, all U.N. departments, offices, missions and programmes are required to develop strategic plans to guide the delivery of their overall mandate and to direct multiple streams of work. Sub-entities create compatible strategies depending on their size and operational focus. Smaller teams within a department/office or mission may not need to create strategies; there are, however, situations in which small and medium teams may need to think strategically, in which case the following best practices can help structure the thinking. Strategic plans should also integrate with work-planning efforts. Work-plans (also called operational plans) outline the specific, shorter-term business objectives, outputs, projects and processes of an entity.

In this section, I believe it is worth summarizing the most important strategic frameworks adopted by different U.N. agencies for the purpose of demonstrating the differences resulting from their complex nature.

The U.N. Secretariat

The whole process of building a strategic plan as elaborated by the U.N., and focusing on the procedure of planning in U.N. Secretariat, comprises eight steps as follows (U.N., 2015):

1. External input gathering;
2. Internal input gathering;
3. Vision statement setting;
4. Creating objectives and using a strategy map;
5. Strategic performance measures;
6. Strategic initiatives;
7. Identifying strategic risks; and
8. Managing a strategy.

The U.N. Development Programme

To address development programmes' need in incremental changes, UNDG proposed a cyclic strategic planning process through ten key steps. Each of these measures is, to a certain extent, implemented on an annual basis, which does not necessarily mean that all of the elements of the plan have to be changed each year (see Figure 2). Accordingly, strategic goals can remain unchanged. Programmes and activities may, during a planning cycle, change as they are prone to the influence of different processes, in part, and this can impose a change in the dynamics of the implementation (UNDP, 2010).

1. Strategic planning preparation involves participants, organization, and communication;
2. Strategic framework;
3. Definition of mandate, vision, and mission;
4. Situation analysis;
5. Strategic issues and strategic goals;
6. Strategic programmes;
7. Determination of the costs and linking the strategic planning process to the budgeting process;
8. Monitoring and evaluation indicators;
9. Determining criteria to be used to define priority activities; and
10. Developing action plans.

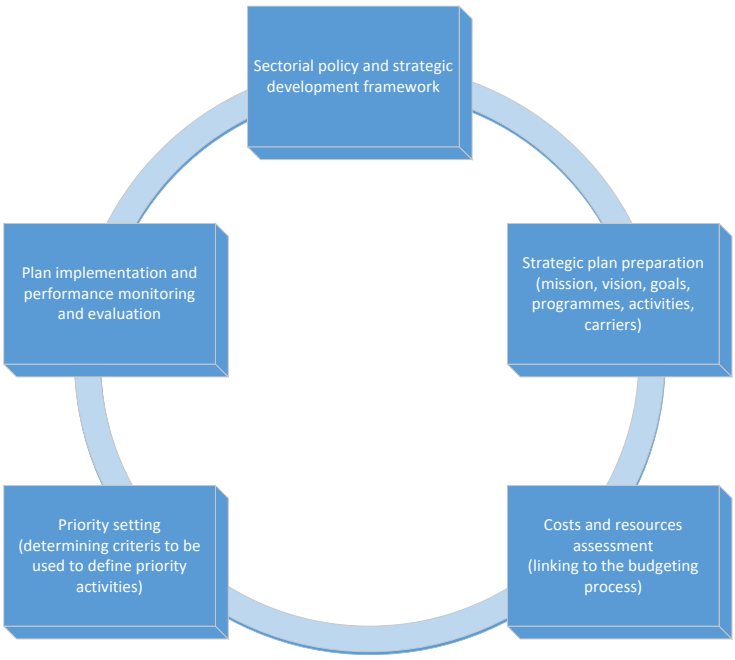


Figure 2: The Strategic Planning Process and its Cyclic Nature (source: UNDP, 2010)

The U.N. Jointed Inspection Unit (JIU)

In JIU`s view, a corporate strategic plan should respond to the request of governing bodies to receive regular and transparent information on what work is done and how, and in particular be a tool for planning, monitoring, and reporting on the impact of the work with regard to the underlying mandates (Inomata, 2012). As such, a strategic plan should be a corporate document, endorsed by the governing bodies, from which Secretariats can draw up their internal work plans in relation to the agreed corporate plan. A strategic plan should also respond to the managerial needs of an organization, as a tool that will serve as the organizational roadmap so that each division/unit of the organization can place itself in the big picture and relate its daily objectives to the overall achievement of the strategic plan. Accordingly, a full strategic planning cycle should start with consultations based on mandates and definition of long-term goals on specific areas, possibly from system-wide mandates and policy frameworks, when in place. It then cascades into the definition of concrete work plans within the organization; their implementation, Mid-Term Reviews that can influence a revisit of the initial strategic plans; and lead to final monitoring and reporting. The results of this process can feed into the new cycle (Inomata, 2012). The steps include (see Figure 3):

1. Strategic plan based on the consultations and strategic framework;
2. Internal work plans with objectives and time horizons;
3. Implementation;
4. Monitoring and Mid-Term Reviews;
5. Implementation adapted to Mid-Term Reviews; and
6. Evaluation, reporting, and lessons learned.

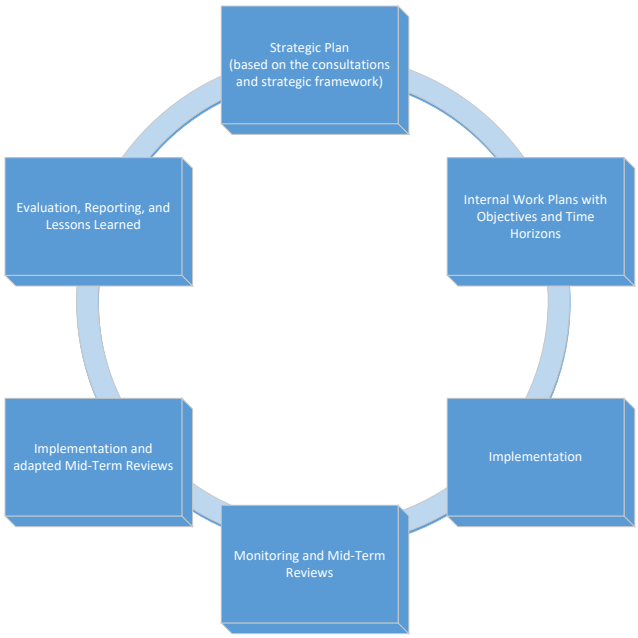


Figure 3: JIU Proposed Cycle for a Standard Strategic Planning Process (source: JIU, 2012)

The World Bank Group

World Bank strategic planning process framework is built on a cooperative effort between senior management and staff taking responsibility for the effort (World Bank, 2013). Typically, ten steps comprise the whole process including:

1. Agree on a strategic planning process;
2. Carry out an environmental scan;
3. Identify key issues, questions, and choices to be addressed as part of the strategic planning effort;

4. Define or review the organization's values, community vision, and mission;
5. Develop a shared vision for the organization;
6. Develop a series of goals or organizational status statements which describe the organization in a specified number of years – assuming it is successful in addressing its mission;
7. Agree upon key strategies to reach the goals and address key issues identified through the environmental scan;
8. Develop an action plan that addresses goals and specifies objectives and work plans on an annual basis;
9. Finalize a written strategic plan that summarizes the results and decisions of the strategic planning process; and
10. Build in procedures for monitoring, and for modifying strategies based on changes in the external environment or the organization.

Compared to the U.N. Secretariat, JIU, and UNDP, World Bank has its focus solely on the strategic preparation and building procedures. Strategic implementation, monitoring, and the continuous improvement processes are outside the scope of its framework.

2.2.3 Challenges with U.N. strategic planning

A series of difficulties in the U.N. strategic planning paradigm can be summarized as follows (Inomata, 2012):

1. Lack of system-wide coordination for strategically planning the implementation of core mandates of the United Nations system entities, so as to foster coherence and synergies in their activities, thus avoiding overlapping and duplication of services to member-states, as exemplified by the proposed concept, '*Delivering as One*';
2. Weak in the implementation of results-based management by defining corporate strategic plans and developing the related tools required for monitoring, evaluating and reporting;
3. Weak in the role of the United Nations Strategic Planning Network, preserving its flexibility, building on its achievements and developing a peer review process;
4. The disjointed allocation of regular and extra-budgetary resources reduces the predictability of funding to achieve strategic goals;

5. Strategic plans not used as a roadmap for building in-house substantive and administrative capacity or the infrastructure of the organization to achieve corporate objectives over time; and
6. Last but not the least, there is no mechanism to deal with institutional (internal) pressure, such as culture and political (external) pressure in the process.

Evidently, U.N. organizations not only need to be fast to react to change in a continuously shifting political climate while at the same time, maintain its relevance, remain steady in its actions through the realization of missions, and continue enhancements to project and process management under unpredictable, uncertainty and complex global business conditions. Hence, it often renders the boundary of strategic planning and strategic formulation, trying to align with program performance and adoption of transformation increasingly problematic. Other than the aforementioned strategic planning and formulation, this study also considers the factors from both external and internal pressures that form the foundation of this study, which in turn, is to identify the significance, relevance, and interdependence among four dimensions - strategic planning, strategic formulation, institutional pressure, and political pressure. There is little research done in this regard.

2.3 Performance Management in U.N. Organizations

The Corporate Performance Management and Measurement is one of the most popular terminologies in all sectors today. In the past 20 years, its implementations spread rapidly from the private sector to the public sector in the developed world and have recently found its way in many developing countries. Nowadays, the impression of managing organizational performance is widely accepted and adopted all over the world, and the U.N. is no exception. The performance measure is a mechanism to evaluate the goals identified during the strategic implementation. Unfortunately, there is no common view regarding the '*WHAT*' and '*HOW*' of organizational performance management. Some U.N. organizations today raised concerns about their need of developing a performance framework to answer the expectations from member-states. At the same time, management in U.N. agencies is focusing today on the application of the results-based management framework, which is viewed as a combined solution to the strategic planning, and the results-based performance management.

Results-based management (RBM) has been in existence for several decades as a management practice in business and public administration. The approach of thinking through logically what an organization or business is trying to achieve and how to measure its performance was popularized by Peter Drucker (1964)'s concept of Management by Objectives in the 1960s and 1970s. Within public administration and the development sector, the Logical Framework Approach emerged and its variations such as outcomes hierarchies and goal-oriented project planning. As the emphasis is on managing to achieve results, RBM became popular in the 1990s as part of the public sector reform agenda, also known as New Public Management, of some developed countries, such as Canada. Some respective agencies, such as the Australian Aid, the Canadian International Development Agency, and the Department for International Development of United Kingdom, and multilateral organizations, such as the World Bank Group and the OECD, have adopted RBM as an approach to managing development cooperation. The adoption of RBM in development cooperation by respective organizations was in large part a response to increasing pressure from the public of donor countries to demonstrate the effectiveness of the aid provided. Since the 1990s, U.N. organizations faced similar challenges from the donor states, and the challenges remain today. There were pressures on funding with more demands from the donor states for achieving greater efficiencies and effectiveness.

2.3.1 Definition performance management

Performance is about doing the work, as well as the results obtained. It can be defined as the outcomes of work in that they provide the strongest linkage to the strategic goals of an organization, customer satisfaction, and economic contributions. Today in the U.N., there is no agreement on a common definition of results-based management or performance. As we have seen with change and change management, different U.N. organizations defined it in a variety of ways, of course, reflecting their different contexts.

The U.N. Joint Inspection Unit, as the only U.N. wide audit body, defines it as follows (Bester, 2012):

'*A management strategy by which the Secretariat ensures that its processes, outputs, and services contribute to the achievement of clearly stated expected accomplishments and objectives. It is*

focused on achieving results, improving performance, integrating lessons learned into management decisions and monitoring and reporting on performance.'

The OECD outlines a more comprehensive description of results-based management (described in the discussion paper of the OECD) where results-based management is seen as (Binnendijk, 2001):

'*A broad management strategy aimed at achieving meaningful changes in the way in which agencies operate, with improving performance and achieving results as the central orientation. Result-based management provides a coherent framework for strategic planning and management by enhancing on learning and accountability*.'

U.N. Development Group (2011) outlines it as '*RBM is a management strategy by which all actors, contributing directly or indirectly to achieving a set of results, ensure that their processes, products and services contribute to the achievement of desired results (outputs, outcomes, and higher level goals or impact). The actors, in turn, use the information and evidence on actual results to inform decision-making on the design, resourcing, and delivery of programmes and activities as well as for accountability and reporting.*'

The past decade or so has seen an increased emphasis on results in the United Nations Development System (U.N., 2012). This focus on results is part of the broader United Nations reform agenda that seeks to improve the coherence of the United Nations system, its effectiveness, and its accountability. Results-based management has been widely adopted in U.N. organizations to answer the reform agenda, conceptualized as a results chain of inputs-activities-outputs-outcomes-impact (U.N., 2012). The assumption is that actions taken at one level will lead to a result at the next level like results chain flows, and in this sense, the chain stipulates the sequence actions taken to achieve a particular result (see Figure 4).

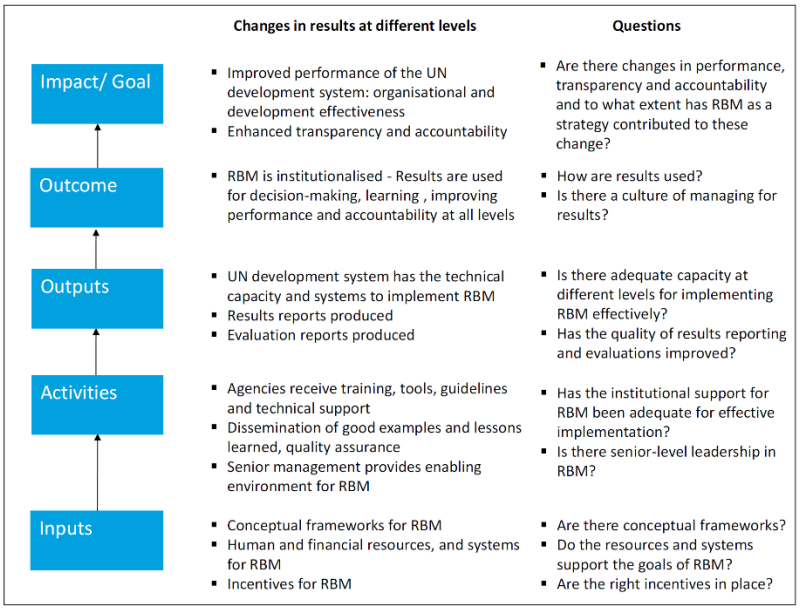


Figure 4: Results Chain for Progress with Results-Based Management in the United Nations Development System (source: U.N., 2012)

2.3.2 Current state of performance management

Responding to the request of the Economic and Social Council in ECOSOC Resolution 2011/7, the Secretary-General was asked to undertake '*...A review of progress made by the United Nations development system to improve results-based strategic planning and management to improve accountability and transparency, and identification of measures to further enhance its long-term delivery and results...*' (ECOSOC, 2011).

Mackenzie (2008), in reviewing results-based management in the United Nations system noted that while the various bodies in the United Nations had different definitions of results-based management, these definitions tended to revolve around themes of learning and improvement of results. What is evident from the many definitions is that the purpose of results-based management is to achieve improved organizational performance through organizational learning and to meet accountability obligations (Meier, 2003). Furthermore, results-based management is a broad management strategy and is not synonymous with performance monitoring and evaluation. Results-based management has been part of the United Nations reform agenda for well over a decade. Since the 2007 Triennial Comprehensive Policy Review, there have been increased efforts on the part of the UNDS to enhance results-based management within individual agencies and in

countries, through The United Nations Development Assistance Framework (Balogun, P., 2012). Further impetus for improving results-based management (also viewed as performance management) comes from programme and donor countries demands to demonstrate (a) that it is achieving its objectives, (b) that it does so efficiently and (c) that its activities are relevant to the needs and priorities of the programme and contributes to improved and sustainable development outcomes.

Nevertheless, U.N. organizations are still facing various challenges during the implementations of results-based management (performance management), especially those from environmental as well as the institutional influences. The UNDP summarized these challenges as follows:

1. Evaluation and Accountability: U.N. agencies are good at defining and measuring results at the output level as outputs are amenable to measurement. Meaningful definition and measurement of the results are not easy, and many agencies experience difficulty in developing realistic but politically sound indicators for these levels of results. Some suggest that vague outcomes are also a way to avoid being held accountable. Defining and measuring results in the development environment is a complex issue for governments and development organizations, and United Nations agencies are no exception. Agencies can measure actual outputs, for example, the number of children immunized or the percentage of households receiving relief. Measurement at the output level is essential to enable the agency to monitor the use of resources, implementation of activities linked to those resources and what specifically was delivered through these activities, namely the outputs.
2. Monitoring and Reporting: However, results-based management requires that agencies also define and measure at the outcome level. Defining measurable results for development interventions such as advocacy, capacity building, and advisory services can be done, but are not as straightforward.
3. Culture and Leadership: Organizations in the UNDS are expected to uphold the principle of national ownership of results and as far as possible, use national systems. The challenge for agencies is that in many instances, results-based management in program countries is either non-existent or under-developed.

4. Program Focus: Country-level programming has to respond to or align with national priorities to ensure relevance and simultaneously be aligned to the corporate priorities of the agency. That can create tension between the business level and country level for organizations that operate on a decentralized basis. While these are not inherently contradictory demands, they are not easy to balance. There is little doubt that the corporate level of agencies must set the strategic direction of the organization. Senior management at the corporate level is expected to be able to account, based on evidence, for the performance of the organization as a whole and example, whether it has made a substantive contribution to internationally agreed goals. The corporate level has to be responsive to the priorities of their executive boards and various inter-governmental structures. The temptation at the enterprise level, therefore, is to standardize as far as possible and to develop detailed corporate strategic plans.
5. Support System: Results-based management is a system, and for it to be implemented effectively, all elements of the system must work. If one aspect of the scheme is weak, it lessens the overall effectiveness of results-based management. The relevant resources, workable management and accountability systems, and knowledge management must be in place to support results-based management. One of the major deficiencies in results-based management is the weak link between the results framework and the resources framework of country programs and The United Nations Development Assistance Frameworks (UNDAFs). Alignment of plans to resources is a fundamental principle of results-based management, yet in practice, there are often gaps between plans and the resources realistically available for implementation. UNDAFs and country programs are seldom fully funded at the time of their development and resource mobilization to fill the gaps in the budget have to be done during the implementation phase. Alternatively, projects or programs for which funding is readily available, find their way into the results framework, even if their contribution to the achievement of an outcome is tenuous. That weakens the integrity of the results-based management approach.
6. Culture and Leadership: Building a results culture and fully institutionalizing results-based management is perhaps the most difficult aspect of results-based management. There are disincentives in the system inhibiting the development of a results culture. There is a high level of awareness of results-based management in all agencies of the UNDS, and

many staff members do have an understanding of the basic concepts of results-based management and what the U.N. system hopes to achieve through the use of results-based management. The strengthening of an evaluation culture is part of the important task of developing a culture of results. There is a sense at the senior levels that agencies are moving in the right direction in their implementation of results-based management and that a culture of results is emerging or getting stronger, about where they were in 2007. Agencies are at different stages in their '*maturity*' in the application of results-based management so that these sentiments may apply to some organizations and not to others.

Conclusively, this study will focus on the challenges in the results-based management to identify the magnitude of their interdependency among factors from six identified dimensions, i.e. Culture and Leadership; Programme Focus; Adjustment and Learning; Monitoring and Reporting; Evaluation and Accountability; and Support Systems. Also, this study will examine the degree of significance on its interaction with the factors of other management models in the United Nations.

2.4 Project Management

In today's rapidly changing world, the project management approach, due to its obvious advantages, continues to be adopted by both public sector and the private sector. These organizations have increasingly been restructuring their works into programs, projects, and products using various management methodologies, frameworks, and practices. The project management approach gives the promise to help realize business objectives and strategies keeping in line with the overall business vision and goals with proven efficiency and effectiveness. Influenced by many success cases from both sectors, starting from 2005, U.N. agencies have widely deployed project management methodologies, adopting PRINCE2®, PMI, or a hybrid solution. Implementation of the adopted methodology was integrated into their management frameworks and tools that it was treated as not only a key performance indicator but also an insurance to increase project's success rate to cope with the exciting challenges in their political nature environment (Saadé and Wan, 2015 and 2017). However, it is interesting to observe that even with significant efforts put into such establishments, like organizational performance management, there is no coherence in intention to standardize the approach across U.N. agencies. Examples like UNDP has built its self-invented methodology, IAEA and International Civil Aviation

Organization (ICAO) adopting PRINCE2® for the corporate projects and applying Agile methodologies to some bureau-level projects, and, at the same time, ITU is using a hybrid solution from both PMI and PRINCE2® to implement region and country level projects. Consequently, it will be indeed a challenge to align outputs, outcomes, and impacts of different project management practices to improve, upstream, the planning as well as the formulation of an organizational strategy and, downstream, the results-based management for performance measurements.

Conclusively, project management methodologies and related management frameworks are rarely on the main agenda in the U.N. Even, today, most of U.N. organizations do actively adopt them as a delivery means to realize the strategic implementation phase of the whole strategic management cycle, other than the strategic planning and strategic formulation phases. Therefore, it is imperative that this study examines the effects of the entire strategic management framework cycle in the U.N. to identify the most relevant factors and the degree of correlations among them to enhance the better understanding of U.N. project management practice as well as to increase the success rate in strategic implementation, through project delivery.

2.5 Realizing the U.N. Reform

Mintzberg's assertion that strategic planning often amounts to strategic programming in practice may be on target, in part, in identifying what is needed regarding overall strategic management in public agencies. Strategic programming as described by Mintzberg consists of clarifying strategy and translating broad vision into more operational terms; elaborating strategies in greater detail and developing action plans that specify what must be done to realize strategies; and assessing the implications of strategic mandates on the organization's operating systems and revising budgets, control systems, and standard operating procedures. As planners attend to these critical tasks, they will help their agencies shift from strategic planning to broader strategic management (Mintzberg, 1989).

Strategic management is largely a matter of utilizing and coordinating all of the resources and venues at top management's disposal, enforcing a kind of '*omnidirectional alignment*' among them in the interest of advancing the strategic agenda (Poister and Van Slyke, 2002). U.N. organizations, therefore, can develop action plans for implementing particular policy initiatives and utilize project management approaches to ensure that they will be carried out to completion.

To provide accountability for results, they can assign lead responsibility for implementing strategies to individual managers or operating units, and they can create action teams to flesh out and oversee the implementation of the cross-functional strategy.

Effective strategic management must also be concerned with monitoring external trends and forces as well as internal performance on an ongoing basis, refreshing intelligence along the way, and revising strategy when and as needed. The resulting sense of how things stand can be invaluable in shaping the timing and nature of strategic planning efforts. Very often, for example, strategic planning efforts appropriately consist of plan updates or refinements of existing strategy or otherwise looking for ways to advance existing priorities more effectively. At times, however, U.N. organizations may need to recognize that they are at a crossroads and face epochal shifts (Barzelay and Campbell, 2003) in environment and expectations that may call for refocusing their entire mission, moving in new directions, and revamping priorities substantially. U.N. is no exception from putting these efforts and, in fact, it is one of the biggest concerns coming from member-states regarding how U.N. can add '*U.N. value*' on top of its intergovernmental nature services and fulfill its mandates in today's global society.

In summary, an efficient approach for U.N.'s decision makers and strategy advisors is to link strategic planning much more closely with performance management processes in response to continued pressure for accountability as well as their commitment to managing results. More specifically, they will need to effectuate five fundamental changes in the way of managing U.N. organizations over the next decade:

1. Shifting from strategic planning to strategic management focus;
2. Moving from performance measurement to the results-based performance management;
3. Linking U.N. strategic objectives, performance management, and change efforts more efficiently; and
4. Integrated U.N. existing results-based management, project management, and strategic management as a continuous improvement process cycle.
5. Strengthening enterprise architecture to enable organizational changes.

Making these five transitions will be essential to enable U.N. organizations to focus attention on the most appropriate goals and to manage realizations effectively to achieve these aims. In the next chapter, a review of the literature will provide the theoretical basis for this study.

CHAPTER 3 LITERATURE REVIEW

This chapter provides a detailed literature review of the theoretical background of the study, primarily in change management, strategic management, performance management, enterprise architecture, and project management. Moreover, in this section, I review the trend in incrementalism, multidimensional adjustment, pluralism, and integrated school among management disciplines. Throughout the review, I discuss why the study of the above theories is vital in the context of the U.N. and provide linkages between them and current U.N. practices. I conclude this section by proposing a set of dimensions necessary to assess the effect of integration among proposed management disciplines, within the U.N. context. Essentially, the dissertation argues that the integrated school of thought is a cause-effect approach making sense of a holistic view of change influences across the multidisciplinary nature of the U.N. context.

3.1 Change and Change Management

This section reviews change and change management with an emphasis on models and approaches as they relate to the U.N. organizations' current practices. The U.N.'s change agenda is sensitive to any alteration of existing project activities, programme focus, mandates, and environmental factors for all U.N. organizations. Also, all these reform efforts involve virtually any aspect of a U.N. organization. It is important to revisit the definitions of change and change management, outline the various types of change, present some models and approaches to change, and provide linkages to the U.N. context. This review does not serve as a critical analysis but rather an assessment of both traditional and contemporary models and approaches to change management and how they translate into the U.N. context.

3.1.1 Background

It is evident that both senior management groups and employees have a shared perception of change, and feel the same urgency for change management (Kotter, 1995; Anderson and Anderson, 2001). Therefore, it is necessary for all stakeholders to commit to change whenever it is required (Bennett et al., 1994). Fitz-Enz (1997) also supports this view and argues that when the strategy links to corporate culture and systems, efficiency and effectiveness can be achieved. In a similar vein, Gibson et al. (2000) stress that while organizational effectiveness is determined by a

multitude of factors, group effectiveness, and individual effectiveness together will determine overall organizational effectiveness, efficiency, and success.

Change management, according to Szamosi and Duxbury (2002), is an integral part of life and is a constant in most organizations. Some U.N. organizations, all the time, face various forms of '*competitions*' from NGOs, industry-funded or other government-funded commissions, conferences, and organizations regionally and internationally. For that reason, it has become essential for the U.N. to manage its change effectively both to sustain its mandates and to maintain its relevance as well as unique position in the global community. Unexceptionally, this feel of an urgency to changes is common to all U.N. organizations. However, trying to define change management, was shown by the literature to be always a challenging theme. According to Stewart and Kringas (2003), '*change management, like 'change,' is a difficult term to define.*' Kanji and Moura (2003), and Lycke (2003) claimed that changes can be numerous and could also include changes to procedures, structures, rules and regulations, technology, training and development and customer needs within organizations. According to Kanter (1992), change involves the crystallization of new possibilities such as new policies, new organizational behaviors, new management patterns, or new methodologies based on the re-conceptualized patterns in the institution. The enterprise architecture for change involves the design and construction of new patterns, or the re-conceptualization of old ones, to make new, and hopefully more productive actions possible. Thus, the term '*change management*,' according to Stewart and Kringas (2003), has become '*a ubiquitous theme in management literature.*'

Kanter, Stein, and Jick (1992), from the organizational behavior perspective, considered a change to be '*the shift in the behavior of the whole organization*.' In other words, most organizations are influenced by changes in the environment that require adaptation of internal processes (Senge et al., 1999). From the perspective of the planned approach to organizational change, Robbins (1990) maintained that change should not be incidental in nature. Dunphy (1996) states that all change initiatives must be planned actively with all the relevant stakeholders. Furthermore, from a view of the contingency approach, proposed change must have a specific purpose for the organization to remain in a viable state. Also, such change should be a continuous and adaptive process to sway '*employees so that they buy into new ideas or shaping the formation of employees*' identities so that their intuitions become consistent with the organizational strategic

direction (Lawrence et al., 2006). Several approaches, including the planned approach and Anderson and Anderson's model, also stress the importance of employees' engagement in change initiatives and, even, decision-making processes. Zimmerman (1995) argued that employees should always be the key players in the facilitation, implementation, and management of actual change because employees are directly involved in the process of change in some form or the other. It is just as important, to recognize that employees can also be the biggest hurdle to implementing change. Therefore, the art of such implementation is to identify the '*balanced point*.' From the resource-based view, Harvey and Brown (1996) suggest organizations that eschew change must be able to sustain a stable identity and achieve operational goals. On the one hand, for successful change to occur, organizations are required to foster proper coordination, strong leadership, and clear communication to exploit and develop their resources. (Ford and Saren, 1996) On the other hand, Senge et al. (1999) viewed change as '*profound*' when organizations '*build capacity for ongoing change*' by getting to the '*heart of issues*.' They primarily focus on the thinking behind the change processes instead of processes favoring structural and strategic changes.

Accordingly, to limit the opposition to change, Swedberg and Douglas (2005) advocated the incremental change approach in organizations that face this dilemma. This approach is perceived as '*fine-tuning … making relatively minor adjustments in a system*' (Swedberg and Douglas, 2005). Likewise, Nadler and Tushman (1995) explained, incremental change as a series of minor modifications, each of which 'attempts to build on the work that has already been accomplished and improves the functioning of the enterprise in subtle increments. Proponents of this approach to change see incremental change as a normal and ongoing process occurring in the U.N. Some U.N. organizations, e.g. UNDP, adopt this kind of incremental-based change management in stages without often changing its programme goals. This type of change fosters more efficient ways of getting employees to work collaboratively, eventually resulting in the organization performing more efficiently and more (Swedberg and Douglas, 2005; Quinn, 1996; Nadler and Tushman, 1995). While this approach is favored by some organizations (Swedberg and Douglas, 2005), other researchers like Quinn (1996) see no merit in its use. Quinn (1996) maintained that this type of change '*is usually limited in scope … [it] usually does not disrupt our past patterns … it is an extension of the past*'. More specifically, continual '*fine-tuning*' of processes (Swedberg and Douglas, 2005) could mean creating better ways to involve employees in

organizational processes or improving employees' access to one another and providing meaningful information about the organization. These incremental changes may lead to a fundamental shift in an organization's way of doing business. Thus, incremental change involves the kind of '*constant tinkering*' that organizations engage in to '*improve the fit among the components of the organization*' (Nadler and Tushman, 1995). U.N. organizations choosing not to participate in incremental change (the method selected by the UNDP) implement other approaches:

1. Fundamental approach – the implementation of a standards-based approach that necessitates dramatic changes in the organization;
2. Transitional approach – this involves the slow evolution of the organization through the introduction of mergers, new processes or technologies; and
3. Transformational approach – the organization rethinks its mission, culture, activities and critical elements of success.

Change and change management are critical in that they set the scene for required necessary interventions. Change interventions fall into three main types:

1. Top-Down change implies an imposed change from senior management. The top-down approach aims at introducing changes quickly by dealing with a problem directly.
2. Transformational change is a shift in the business culture resulting in a change of the underlying strategy and processes. A transformational change management relies on leaders setting a personal example challenging people to think 'outside the box' and innovate while providing a safe environment for doing so.
3. Strategic change is the process of managing change in a structured, thoughtful way to meet organizational goals, objectives, and missions. Strategic change management is based on a certain recipe and is in contrast with the top-down approach. In that it aims to introduce new behaviors at work, allowing employees to witness the benefit for the organization and, thus, based on the evidence, internalize the change in their 'ways of working' (Hiatt and Creasey, 2003).

According to literature, some confusion exists about the definitions of '*models of change*' and '*strategies of change*' (Mintzberg, 1979; Aldrich, 1979; Johnson and Scholes, 1993). Sadler (1996) claims that a strategy adopted by an organization is a means of attaining the focal objective

set by the organization. In other words, '*it is the means chosen for the achievement of purpose.*' It encompasses, primarily, a mission; vision; a strategic position; specific objectives, goals, and key values; strategy; long-term and operational plans; and tactics (Harper, 2001). To that effect, any model of change refers to assumptions and beliefs that when combined in a systematic fashion, results in some form of change in the organization (Tichy, 1993). Thus, change models are the frameworks upon which strategies are built and implemented. This study primarily emphasizes on the review of change management models and approaches. A variety of models and theories exist in the literature for implementing change in both the public and private sectors. However, when considering models of change the issue of approaches to change needs to be addressed. According to Tichy (1983), '*the use of the term 'model' refers to a set of assumptions and beliefs which together represent reality.*' As such, Appendix A elaborates on five theory-based models of change that would provide this study a holistic understanding of different processes, views, and approaches from literature. The reviews combining with current change practices in the U.N., elaborated in the next section, could help this study in constructing a U.N. change management of thought to address the research objectives.

3.1.2 Adaptation of the theory of change to the U.N.

The term '*Theory of Change*' or '*Program Theory*' originated in the field of program evaluation. Sometimes also called '*program theory,*' it refers to the construction of a model that specifies the underlying logic, assumptions, influences, causal linkages and expected outcomes of a development program or project. Through the collection and analysis of performance data, this model can be tested against the actual process experienced and results attained, by the intervention (Funnell and Rogers, 2011; Morra-Imas and Rist, 2009; Rogers, 2008). The Theory of Change is a combination of two related theories, i.e. process, and impact theories (Donaldson, 2007). Ideally, process theory and impact theory should be developed together to complete the whole Theory of Change process. On the one hand, process theory relates to the program itself, describing the inner workings of a program and includes the assumptions that are made about an appropriate target. On the other hand, impact theory addresses especially the benefits to the target itself that it expresses a causal relationship between the purpose and program intervention (see Figure 5).

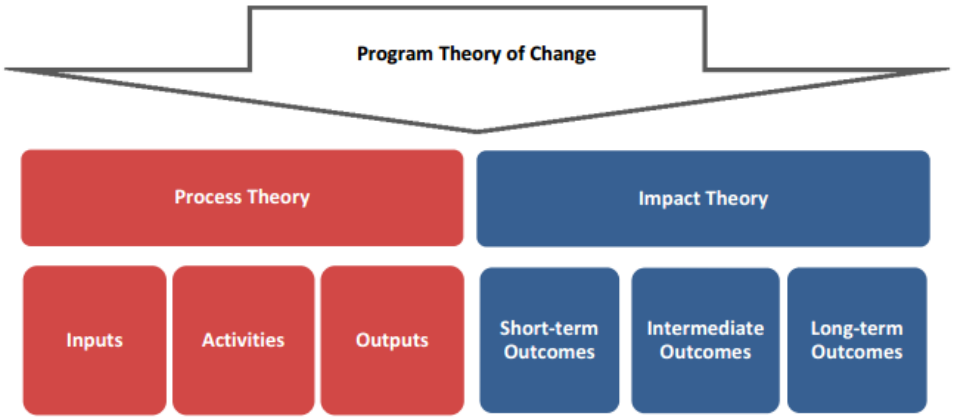


Figure 5: Theory of Change: Logic Model

At its heart, the Theory of Change spells out an initiative or program logic. It defines long-term goals and then maps backward to identify changes that need to happen earlier (preconditions). The identified changes are mapped graphically in causal pathways of outcomes, showing each outcome in logical relationship to all the others. Interventions, which are activities and outputs of any sort, are mapped to the outcomes pathway to show what stakeholders think it will take to effect the changes, and when. The Theory of Change provides a working model against which to test relationships and assumptions about what actions will best bring about the intended outcomes. A given Theory of Change also identifies measurable indicators of success as a roadmap to monitoring and evaluation. Theory of Change is both process and product oriented: the process of working out the theory, mainly in group sessions of practitioners and stakeholders led by a capable facilitator; and, as the result of that process, a document of the change model showing how and why a goal will be reached (Rogers, 2008).

Moreover, the Theory of Change further defines the external factors that influence change along the major pathways i.e. factors that affect whether one result can lead to the next. These contributing factors are called drivers and assumptions. This approach has the benefit of incorporating the intended logic of an intervention into its implementation context.

The Theory of Change hinges upon defining all of the necessary and sufficient conditions required to bring about a given long-term outcome. Theory of Change uses backward mapping requiring planners to think in backward steps from the long-term goal to the intermediate and then

early-term changes that would be necessary to cause the desired change that creates a set of connected outcomes known as a '*pathway of change*' (Figure 6). A '*pathway of change*' graphically represents the change process as it is understood by the initiative planners and is the skeleton around which the other elements of the theory are developed (Macredie et al., 1998).

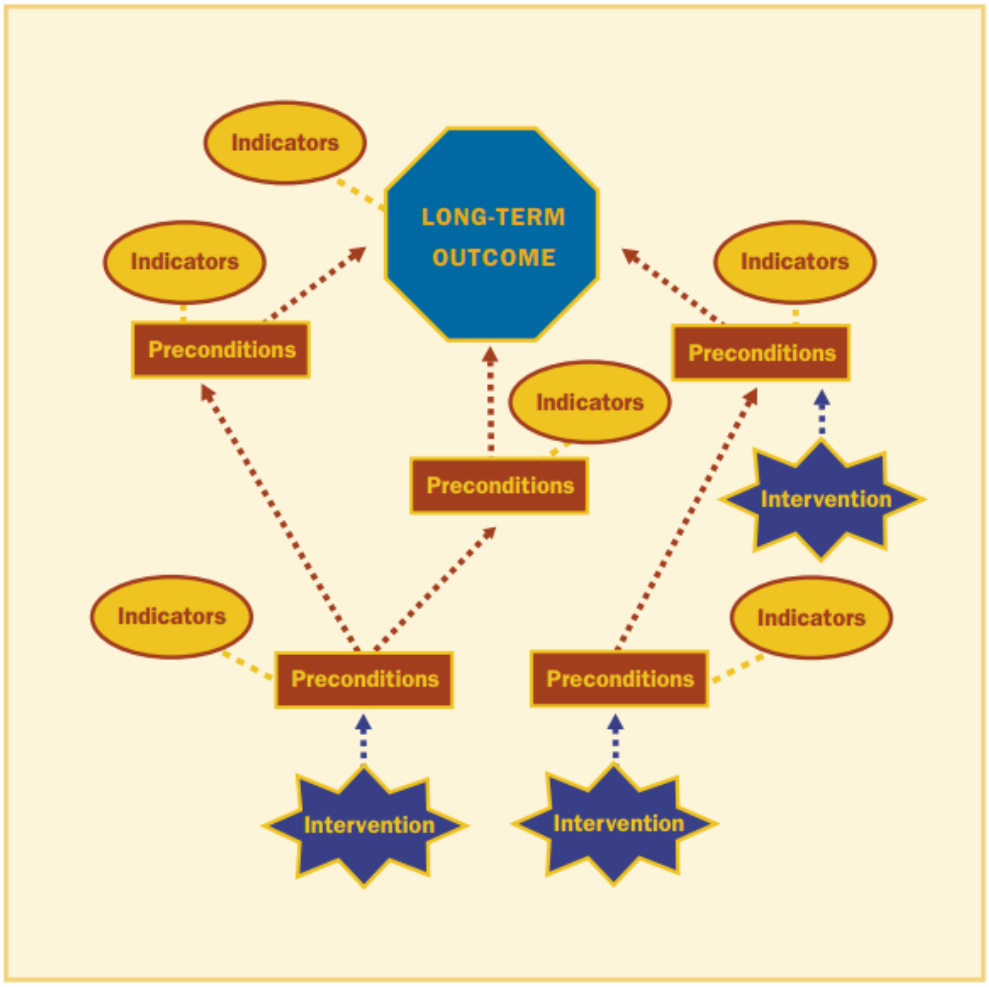


Figure 6: Elements in a Pathway of Change (source: Anderson, 2004)

In the final Outcome document of the 2030 Agenda for Sustainable Development (U.N., 2012), the U.N. member-states highlighted the role of the U.N. system in supporting implementation of the SDGs, specifically, underlining '*the important role and comparative advantage of an adequately resourced, relevant, coherent, efficient and effective U.N. system in supporting the achievement of the SDGs and sustainable development.*' The member-states also stressed '*the importance of system-wide strategic planning, implementation, and reporting to*

ensure coherent and integrated support to the implementation of the new Agenda by the United Nations development system.' In response, a proposed '*Theory of Change*' on how the U.N. development system can best support the implementation of the, 2030 Agenda for Sustainable Development was established.

Today, the Theory of Change has been widely adopted as a planning process model in the U.N. allowing its agencies to address the associated causal chains from inputs to outputs and through to outcomes, intermediate states, and impact. Some examples include the U.N. Environment and UNDP evaluations which are structured around a project or programme's Theory of Change to assess the causal logic of the intervention and determine whether all external factors affecting outcomes, impact, sustainability, and up-scaling have been carefully considered.

3.1.3 Application of Theory of Change to the U.N.

More so today than ever, with increasing demands from the global society, all U.N. organizations are facing challenges, sourced from political, social and economic forces, and at the same time, are under pressure dealing with inherent uncertainties due to mandates by member-states. In considering the transformational change theory, organizational effectiveness and efficiency, technological innovation, legislation, internationalism, and workforce expectations equally are just some of the multitudes of factors imposing ever increasing pressures to U.N. organizations to create a sense of urgency to change. As a result, of '*the unstable environmental conditions in which modern organizations operate means that the ability to successfully manage change has become a key competitive asset*' (Macredi and Sandom, 1999).

These current changes are usually rapid in nature and may encompass the entire organization or a substantial portion of it. Thus, to be sustainable and maintain its relevance to the global community, U.N. organizations continue to find their ways of implementing new goals, policies, strategies, systems, and methods of working to cope with pressures and forces mentioned above they face. Moreover, other than forces and pressures, facing similar pressure as the public sector, U.N. organizations also face competitions from numerous NGOs and government-funded organizations that constitute additional '*change driver*' on U.N. organizations. However, from the literature review of discussed models and approaches in this section, there is no doubt that the forces, drivers, and assumptions factors behind the organizational change are numerous and varied.

Consequently, all these global changes have stimulated much debate in the U.N. about '*Where U.N. will move to*'. Accordingly, existing operational, technological, financial and business practices have to break away from their traditional business-as-usual modus operandi to provide more being-in-line-with climate change.

In summary, for change models (see Appendix A) to be implemented successfully to organizational change, the following eleven factors should be considered to form the new ground of change management model to U.N. organizations:

1. A sense of urgency: To communicate clearly and honestly a feeling of urgency rather than a sense of doom. By creating both a compelling picture of the desired future and the danger of accepting the status quo, senior leaders greatly improve their chances of gaining the commitment of organizational stakeholders for a necessary change effort.
2. Clear vision and goal: Vision is more than an image of the future. It has a compelling aspect that serves to inspire, motivate, and engage employees. Vision has been described by Manasse (1986) as '*the force which molds meaning for the people of an organization.*' It is a force that provides meaning and purpose to the work of an organization. Vision is a compelling picture of the future that inspires commitment. It answers the questions: Who is involved? What do they plan to accomplish? Why are they doing this? Vision, therefore, does more than provide a picture of the desired future; it encourages people to work, to strive for its attainment. For educational leaders who implement change in their school or district, vision is '*hunger to see improvement'* (Pejza, 1985).
3. Empowerment to employees: The model must address the concept of changing processes to empower employees in the organization to change including evaluating the current systems, processes, and capabilities to facilitate the process of change (Farrell et al., 2005).
4. Employee's engagement to participate: Also, leaders should be involved in stewardship that is, involving other employees in finding solutions and taking action; and creating a healthy work environment that provides the framework for a positive and professional practice agenda (Herrick, 2005).
5. Learning, knowledge, and continuous improvement: The model must incorporate the idea of reinforcing and creating small improvements to encourage additional change. Employees need to understand that every process in the organization can be improved. Leaders must

focus on continuous improvement and reinforce small successes that will encourage employees to seek more opportunities for improvement (Pryor et al., 1998).

6. Resistance and uncertainty: The model should cater for resistance to change; individually and collectively. Employees respond differently to change. Some employees enjoy and embrace change while others resist it. Resistance is a normal reaction to change and should be expected. Greater resistance is encountered during the developmental stages of change – leaders must understand this reaction and need to support employees as they go through these stages of change. Leaders need to plan strategies to enable employees to work through their resistance (Kohles et al., 1995).
7. A sense of ownership: Change plans should not be created in some high-level office and then forced upon employees who are supposed to implement the change. All planning about change should involve a vertical and horizontal microcosm of the organization that creates a sense of ownership of the change on the part of all employees (Collins, 2001).
8. Communication: the communication plan should be an integral component of this change model. Communication is important to gain the support of the change and to encourage employees to '*buy in*.' Successful organizations have to acquire, integrate and use new knowledge to the best of its advantage. Furthermore, they have to be able to combine and exchange information to enhance their processes to guard against failure. All change initiatives must be discussed, explored and communicated to all stakeholders (Farrell et al., 2005).
9. Monitoring and evaluation: The change should be monitored and measured while it is being implemented. It must be noted that the successful implementation of change involves discipline. Employees must be disciplined and should be held accountable for their actions that cannot occur unless measurements of accountability are in place (Collins, 2001).
10. Leadership and accountability: Leaders, too, have to be accountable to the organization for the results of their plans and outcomes. Thus, accountability will require a master plan that can be evaluated at any time (Newcomb, 2005). Change initiators must have strong leadership qualities. According to Kotter (1996) and Shields (1999), Strong leaders have charisma, an inspiration to gain support for their vision, individual consideration, and intellectual stimulation. According to Newcomb (2005), strong leaders must meet the following requirements, namely, have the ability to assess the environment on a continuous

basis; know what their visions are and be able to gain support for them; and have the capacity to execute the plan in order to achieve the vision they have established.

11. Recognition and award system: When employees, supervisors, and managers feel appreciated for what they do and how they contribute to the organization's success, the process of change within an organization goes more smoothly. Team members who feel valued, including managers, supervisors, and frontline employees, are less reactive and more open to changes within an organization that affects them personally. Conversely, employees who feel unappreciated are more likely to react negatively to proposed changes, feeling like they have to defend themselves from being taken advantage of by their organization.

Table 1 below summarizes the dimensions of change and change management and their link to the different models:

Dimension (U.N. Report)	Model/Approach of Change (Theory)
Urgency	The planned approach The emergent approach Anderson and Anderson's model of change
Vision and Goal	The planned approach The emergent approach The contingency model Mintzberg and Quinn's model Anderson and Anderson's model of change Theory of Change
Empowerment	The planned approach The emergent approach Anderson and Anderson's model of change
Employee Engagement	The planned approach The emergent approach Anderson and Anderson's model of change Theory of Change
Learning, Knowledge, and Continuous Improvement	The planned approach The emergent approach The contingency model

	Anderson and Anderson's model of change Theory of Change
Resistance and Uncertainty	Anderson and Anderson's model of change
Ownership	The emergent approach
Communication and Collaboration	The planned approach The emergent approach The contingency model Mintzberg and Quinn's model Anderson and Anderson's model of change Theory of Change
Monitoring and Evaluation	Anderson and Anderson's model of change Theory of Change
Leadership and Accountability	The contingency model Mintzberg and Quinn's model Anderson and Anderson's model of change
Recognition	The planned approach Anderson and Anderson's model of change
Environment	The contingency model Anderson and Anderson's model of change Mintzberg and Quinn's model Theory of Change
Age and Size	Mintzberg and Quinn's model
Technical system	Mintzberg and Quinn's model
Power and Political structure	The contingency model Mintzberg and Quinn's model

Table 1: Summary of Factors in Models of Change

3.1.4 Synthesis

The review in this section, on the one hand, argued that change in U.N. organizations is overwhelmed with its complexity. However, it is clear that managing change has become ever more necessary and had no option for further delay anymore – and this applies to all U.N. organizations. Success in the implementation of organizational change highly depends on its sensitivity to various views of a diverse stakeholders background, on the degree of support from powerful member-states

and the feasibility of the principles of the change approach adopted. Moreover, change in the U.N. seems to have a more profound effect as compared to other sectors. The results in altering the nature of change and change management in the U.N. business environment primarily driven by changes in the global society, the environment, and innovative technologies. Change has also impacted on the way the U.N. manages new working styles, the pace at which change occurs, communication strategies, work ethics and values, employee attraction, retention, and engagement, organizational intelligence, succession planning and, even, organizational behavior.

Other the other hand, this review clearly concludes influential factors from five models of change as well as the theory of change that would have a significant contribution to building U.N. model of change. The results also show current U.N. practice (Theory of Change) has paid less than enough attention and efforts in addressing uncertainty and resistance, making organizations sensing an urgency in change, staff empowerment in leading change, clear accountability, and lack of understanding the effects of power and political structure to the U.N. organizations that would handicap the whole efforts U.N. has put in order to achieve its mandates in management reform for efficiency and effectiveness.

In summary, this section concludes the reviews of change management and its implications for U.N. management reform. Accordingly, the concluding remarks will be not only used to assess the extent of influencing in U.N. change but also examine them from an integration view of all management models discussed in this study in order to understand their significance as a whole.

3.2 Strategic Planning and Strategic Management

The strategic planning process has long been used as a mechanical tool for revitalizing private-owned corporations and government-owned public agencies. Along with the increase of global political instability, economic uncertainty accelerated the pace of technological evolution and consequently social change. There is some disillusionment with those change management efforts that they cannot keep up with the rhythm of change leading to increased skepticism about its overall effectiveness. Some U.N. organizations also put significant efforts on finding the best mechanism to optimize their strategic planning as well as formulation processes to maintain their organizational efficiency and relevance. Due to the complexity of the U.N. context, there is no doubt that the whole strategic planning efforts and processes could prove pointless and the end

product ending up of dubious value when care is not taken to set clear, realistic goals, define action steps explicitly, and elicit the views of the main stakeholder groups. Moreover, strategic goals and strategic choices are often mixed with individual state's political agendas, economic interests, and programme priorities that contribute to blurring the vision further. For that reason, a successful strategic planning process will examine and make informed projections about environmental realities and forces to help U.N. organizations anticipate and respond to change by clarifying their missions and goals, targeting clear and concise objectives, and reshaping its programmes and associated activities.

3.2.1 Background

It is imperative that one of the U.N. priorities is to become more efficient and effective while, at the same time, learn to be agile but stable enough in building core capabilities to meet the increasing demands from member-states while achieving its strategic purpose towards the Sustainable Development Goals by 2030. However, its level of complexity superimposed against increasing pressures for constant organizational change can be attributed to the ever-increasing diverse nature of U.N. missions, which often renders the boundary of strategic formation, aligning the performance management with programmes, and adoption of transformational change, increasingly problematic.

The understanding strategy first hand is essential to this discussion. The concept of strategy has evolved continuously through different paradigms in the past decades. In the past decades, 'strategy' as a concept has developed into a number of various fields including, but not limited to, strategic thinking, strategic leadership, strategic formulation, strategic management, strategic alignment, and strategic decisions. The whole concept has been broadly reviewed by researchers and practitioners in the fields of public administration, organization behavior, social science, business administration, and management. Its study has also been grouped by type of organization or sector where they are applied. Nonetheless, even with many efforts, there is still no shared definition of what exactly strategy and strategic planning intend to achieve. *As far as the U.N., unfortunately, there is still little research done in strategic planning and management.* One of the fundamental questions that many researchers try to answer first, 'What is Strategy?' should be revisited in this study, for the sake of completeness. Originally, the concept of the strategy was

adopted by the military, and later, it has been fruitfully adapted to private business practices. For that reason, from a business viewpoint, the strategy is used to bridge the gap between policy and tactics. Together, strategy and tactics close the gap between the ends (goals) and the means (politics).

What is Strategy?

According to Chandler (1962), '*Strategy is the determination of the basic long-term goals and objectives of an enterprise, and the adoption of courses of action and the allocation of resources necessary for carrying out these goals.*' Contrary to Chandler's comprehensive definition, Steiner (1979) does not bother to define the term, strategy, except in the notes at the end of his book. He notes that '*strategy entered the management literature as a way of referring to what one did to counter a competitor's actual or predicted moves*.' Steiner also points out in his notes that there is little agreement as to the meaning of strategy in the business world. Moreover, different from Steiner's view, Mintzberg (1994) itemizes strategy features that people use '*strategy*' in several different ways, the most common being these four:

1. Strategy is a plan, a '*how,*' a means of getting from here to there.
2. Strategy is a pattern of actions over time; for example, an organization that regularly markets very expensive products is using a '*high end*' strategy.
3. Strategy is position; that is, it reflects decisions to offer particular products or services in particular markets.
4. Strategy is perspective, that is, vision and direction.

According to his definition, Mintzberg (1994) asserts that strategy emerges over time as intentions collide with each other and accommodate a changing reality. Thus, one might start with a perspective and conclude that it calls for a certain position, which is to be achieved by way of a carefully crafted plan, with the eventual outcome and strategy reflected in a pattern evident in decisions and actions over time. This pattern in decisions and actions defines what Mintzberg called '*realized*' or the emergent strategy. Mintzberg's typology has support in the earlier writings of others concerned with strategy in the business world, most notably, Kenneth Andrews. According to Andrews (1980), he presents this lengthy definition as '*Corporate strategy is the pattern of*

decisions in an organization that determines and reveals its objectives, purposes, or goals, produces the principal policies and plans for achieving those goals, and defines the range of business the organization is to pursue, the kind of economic and human organization it is or intends to be, and the nature of the economic and non-economic contribution it intends to make to its shareholders, employees, customers, and communities.' Andrew's definition (1980) obviously anticipates Mintzberg's attention to pattern, plan, and perspective. Andrews also draws a distinction between '*corporate strategy,*' which determines the businesses in which an organization will compete, and '*business strategy*,' which defines the basis of competition for a given business.

Thus, he also anticipated position as a form of strategy. Strategy as the basis for competition brings us to another Harvard Business School professor, Michael Porter, the undisputed guru of competitive strategy. Porter (1996) argues that competitive strategy is about being different. He adds, '*It means deliberately choosing a different set of activities to deliver a unique mix of value.*' In short, Porter argues that strategy is about the competitive position, about differentiating in the eyes of the customer, about adding value to a mix of activities different from those used by competitors. In his earlier book, Porter (1996) defines competitive strategy as '*a combination of the ends (goals) for which the firm is striving and the means (policies) by which it is seeking to get there*.' Thus, Porter seems to embrace strategy as both plan and position. Some well-known researchers have put significant efforts on defining strategy as presented in the following (Table 2)

Researchers	Strategy Definitions
Tregoe and Zimmerman (1980)	Strategy is the framework which guides those choices that determine the nature and direction of an organization
Treacy and Wiersema (1995)	Organizations achieve leadership positions by narrowing, not broadening their business focus
Bowman and Asch (1987)	Strategy can be seen as a key link between what the organization wants to achieve - its objectives - and the policies adopted to guide its activities
Bryson (1988)	Strategy is a disciplined effort to produce fundamental decisions and actions that shape and guide what an organization is, what it does, and why it does it
Quinn (1980)	Strategy relates to the patterns/plans that integrate an organization's major goals/policies and action sequences into a cohesive whole
Hofer and Schendel (1978)	Strategy is the fundamental pattern of present and planned resource deployments and environmental interactions that indicate how the organization will achieve its objectives
Johnson and Scholes (1993)	Strategy is the direction and scope of an organization over the long-term, ideally which matches its resources to its changing environment and in particular its markets, customers and clients so as to meet stakeholder expectations

Table 2: Some Strategy Definitions

In summary, the various definitions presented in Table 2 above agree on some key concepts and themes, which can be listed as:

1. the long-term;
2. mission, purpose, goals, and objectives;
3. direction, orientation, and scope;
4. decision;
5. plan;
6. a course of actions;
7. allocation of resources;
8. positioning the organization within it existing environment;
9. meeting stakeholder expectation;
10. flexibility to changing circumstances;
11. a pattern of organizational moves;
12. patterns that integrate; and

13. shaping and guiding what an organization is, what it does and why it does it.

Some of the definitions adopt strategy from a view of a formal strategic planning process or deliberate decision. Others view strategy of an organization as determined by what it does, or has done, regardless of whether these actions were formally, or informally taken or planned in advance. Some of the definitions also assume that an organization's strategy is a good practice because it enables the organization to achieve its mission, goals, or objectives systematically and efficiently. However, an organization's strategy is not always ending in success due to 'bad strategy.' Rumelt (2011) argues that there are four kinds of bad strategy, namely:

1. a form of '*sound-nice*' nonsense masquerading as strategy concepts or arguments;
2. failure to face the challenges to be overcome;
3. mistaking goals for strategy; and
4. setting wrong or false objectives since organization avoids addressing the real challenges.

If there are some aspects of bad strategy, what then are the aspects of good strategy? R. Courtney (2013) proposed a list of critical success factors as criteria to describe a strategy as good:

1. provide clear direction;
2. inspires people to commitment and action;
3. honors the past as well as looking to the future;
4. reflects the views, aspirations, and expectation of beneficiaries;
5. reflect the views, aspiration, and expectation of other stakeholders;
6. responds to the clearly assessed needs of recipients;
7. reflects the changing external environment and its uncertainties;
8. contain an appropriate resource model to ensure its finance sustainability;
9. is based on a logic model or theory of change;
10. is an evidence-based (McNeece and Thyer, 2004);
11. will be implemented by an organization with the distinctive skills and experience to implement it effectively;
12. with clear outcomes that can be evaluated; and
13. enables the implementation of it to be effectively monitored.

The following table (Table 3) provides a mapping of Courtney's criteria cross-examined with the U.N. organization's strategic planning process.

Strategic Planning Process R. Courtney (2013)	U.N. Secretariat	U.N. Development Programme	U.N. JIU
Provide clear direction	Vision statement setting; Creating objectives and using a strategy map; Strategic initiatives	Strategic framework; Strategic programmes	
Honors the past as well as looking to the future	Identifying strategic risks	Situation analysis	Strategic plan based on the consultations and strategic framework
Reflects the changing external environment and its uncertainties			
Inspires people to commitment and action	Internal input gathering	Strategic planning preparation involves participants, organization, and communication	
Reflects the views, aspiration, and expectation of internal stakeholders			
Reflects the views, aspirations, and expectation of beneficiaries	External input gathering		
Responds to the clearly assessed needs of beneficiaries			
Contains an appropriate resource model to ensure its finance sustainability	Managing a strategy	Determination of the costs and linking the strategic planning process to the budgeting process	
Is based on a logic model or theory of change		Definition of mandate, vision, and mission; Strategic issues and strategic goals	Internal work plans with objectives and time horizons
Is evidence-based			

Be implemented by an organization with the distinctive skills and experience to implement it effectively		Determining criteria to be used to define priority activities; Developing action plans	Internal work plans with objectives and time horizons; Implementation; Implementation adapted to Mid-Term Reviews;
With clear outcomes, that can be evaluated	Strategic performance measures	Monitoring and evaluation indicators	Monitoring and Mid-Term Reviews; Evaluation, reporting, and lessons learned
Enables the implementation of it to be effectively monitored.			

Table 3: Strategic Planning Process: Mapping between Courtney (2013) Criteria and some U.N. Processes

Mintzberg (1994) suggests that part of the problem in defining the concept of strategy resides with the fact that it is used in different ways. He argues that strategy is usually thought of as a plan of action to guide to the future, although sometimes they are merely ploys, i.e. tactics or maneuvers. Meanwhile, there has been a huge change over the last decades in practice in the strategy arena, from the traditional *'strategic planning'* concept, as '*a disciplined efforts to produce fundamental decisions and actions that shape and guide what an organization is, what it does, and why does it*' (Bryson, 1995) towards the idea of '*strategic management*' as '*the process of strategic change*' (Bowman and Asch, 1987). Mintzberg and Quinn (1996) also quote that '*the process of making and implementing strategic decisions*' being those '*that determine the overall direction of an enterprise and its ultimate viability in light of the…changes that may occur in its…environment.*'

3.2.2 Adaptation of schools of thought to the U.N.

By looking at the management schools of thought, elaborated in Appendix B, strategic management, in general, is trying to answer the same questions and to compare the conceivable trails to achieve an organization's strategic objectives. In U.N., commonly, the first question out of the senior management of any organization would be how integrated should a strategy be? While the planning school gives emphasis to the importance of synergy, the entrepreneurial and cultural schools do not see any components, as strategy is one fully integrated perspective. The second question is, especially to U.N. organization, that '*should there be a generic set of strategies that*

U.N. organizations could use, would it be an infinite list?' From the planning school perspective, it has a clear defined set that U.N. could adopt from, while the other schools handle strategies as more in its own distinctive way. The next question deals with the issue of how emergent or deliberate a strategy should be. The prescriptive schools and the entrepreneurial school promote deliberateness, but all ten schools agree that a real world strategy cannot be purely emergent or purely deliberate.

The last three issues are all related to strategic change, integrate with the change and change management discussed previously. Where do new strategies come from? This question refers to the source of strategy, and only the learning school is putting a lot of emphasizing on the learning with ease. The others promote learning by thinking (design school), by programming (planning school), by calculating (positioning school) or by arguing (power school). The pattern or pace of change describes how revolutionary or incremental the change is. The configuration, the cultural, and the cognitive schools believe that change is revolutionary while the other schools of thought promote more incremental change. The last question asks: is strategic change really present in the organizations? The environmental, cognitive and the cultural schools argue that strategies rarely if ever change. According to some schools, like the political one, organizations are in constant change, while they all agree that strategic learning never stops.

With the availability of many different views on the development of strategy and its management (see Table 9 in Appendix B), it is hard for those with responsibility for the management and development of their organization to make decisions about which approach is the most suitable one, and likely there is no such one-size-fits-all one exist. Ansoff and McDonnell (1990) experimented in adopting different approaches to strategy, they found, in a stable as well as relatively simple environment a traditional planning process may be appropriate. In environments which are highly complex and discontinuous, a more experimental, spontaneous, incremental approach may be more suitable. This result enables various approaches to strategic management to co-exist (Joyce and Woods, 1996), instead of one paradigm replacing one or another. As a result, the configuration school of strategy formulation process may be helpful in getting away from the dilemma between a traditional strategic planning process and the experimental emergent approaches. For that thinking, also configuration views transformation as a central process with defined context, segments, time, terms, and conditions in a stable organization and the approach

reviews how different organization's characteristics are grouped together under specific context to determine states and how these organizational states change over time. Therefore, this integrated management of thought may be the most suitable model, used in this study, for U.N. organizations to consider.

3.2.3 Application of strategy development to the U.N.

Strategy development, as described by Dess, Lumpkin, and Covin (1997), '*is an organization- level process that encompasses the range of activities firms engage in to formulate and enact their strategic mission and goals.*' The outcomes from the process constitute strategic decisions which are of critical importance to the organization, as they '*involve a commitment of significant amounts of organizational resources for the fulfillment of organizational goals and purposes through appropriate means…[and]……have an impact on many aspects and functions of the organization, and influence its direction, administration, and structure in fundamental ways'* (Shrivastava and Grant, 1985).

As reviewed in Appendix B on schools of thought, various approaches have postulated their critical theories as to the nature of the strategy development process. The design or planning school contends that strategy formulation is a '*posture and a plan*' (Farjoun, 2002) and advocates a process of strategic planning in advance of a '*rational, analytical, purposeful strategy formulation*' (Cohen, 2001). The process is initiated by the development of a business problem and definition of objectives, followed by the generation and analysis of alternative solutions, and finally the selection of a feasible alternative (Cyert and March 1963; Mintzberg, Raisinhani and Theoret, 1976; Shrivastava and Grant, 1985). Ansoff (1965) and others advocate a planning approach, an intentional process involving a logical, sequential, analytic and deliberate set of procedures. The incremental approach to strategy argues that strategy formulation not rational or formal (Bower, 1970; Burgelman, 1983; Mintzberg and Waters, 1982) but emerges from the '*complex interactions between different individuals with different interests and different perceptions*' (Grant, 2003). This approach emphasizes achieving organizational support and commitment to the strategy adopted (Barney, 1997; Grant, 1995). Others argue that strategy development needs to be seen as the outcome of decision-making processes rooted in the social fabric of organizations (Mintzberg and Waters, 1985). Some others have also highlighted the role of organization leaders, exercising

'*command*' or '*vision*' (Bourgeois and Brodwin, 1984). Organizations are political entities and as such strategies are susceptible to influence from stakeholders (Hickson, 1986) who have different agenda at their ends. Strategies can also be attributed to cultural influences as the focus of the cultural school. Organizations' taken for granted beliefs and assumptions, enable new situations to be perceived in ways which are not unique and established routines provide instant organizational responses. Such frames of reference and routines exist at the organizational (Johnson, 1987) and industry level (Spender, 1989). Those who take an ecological perspective, argue, however, that managers in organizations have little control over the choice of strategies. Factors in the environment impose on the organization so as to select and encourage the adoption of structures and activities which best fit that environment (Hannan and Freeman, 1989). Strategies tend to be common within industries, with changes coming about through variations in processes and systems which may occur unintentionally (Aldrich, 1979).

Arguments over the value of the alternative perspectives have resulted in a more integrated approach to strategy development (Brews and Hunt, 1999; Hart and Banbury, 1994; Menon, Bharadwaj, Adidam, Edison, 1999) and for efforts to be directed to understanding the actual processes adopted by organizations when developing strategy (Hart and Banbury, 1994; Menon et al., 1999; Mintzberg, 1994). As a result, it is recognized that the process is likely to be a multifaceted conceptualization of the strategic development process (Eisenhardt and Zbarack, 1992). A growing extent in the conceptual development of integrated frameworks has been adopted to explain the strategy development process, e.g. Chaffee, 1985; Hickson et al., 1986; Schwenk, 1988; Eisenhardt and Zbaracki, 1992; Hart and Banbury, 1994. Consequently, many of this type of researches have been carried out by scrutinizing the situation in which the strategy development process has been explored. Such research suggests it is unlikely that any explanations reviewed earlier are mutually exclusive, rather that they exist in an integrated fashion. This study builds on an integrated approach to strategy development, to relate such processes to different contextual factors, yielding configurations of strategy development processes (Dess et al., 1993; Meyer et al., 1993; Bailey and Johnson, 1995). Therefore, examination of strategy development process styles and the application of the Bailey, Johnson, and Daniels (2000) multi-dimensional framework, a configuration approach, provides a significant opportunity to contribute given the gaps in current knowledge, particularly about the merits of strategic planning (Grant, 2003).

Bailey et al. (2000) developed a multi-dimension model with the intention of capturing the major themes of the available frameworks. The model adopts a comprehensive multi-faceted approach, measuring strategy development styles across several dimensions. It reflects research evidence of an '*interdependence amongst different decisions and that relatively enduring characteristic, such as CEO risk propensity, corporate control, and planning formality, influence decisions*' (Bailey et al., 2000). That implies continuity in how strategies are developed, indicating that enduring patterns may be perceived in organizational decision making. Based on the influences of strategy development identified in the literature, and particularly Hart's (1992) model, Bailey et al. (2000) derived and tested six discrete underlying dimensions of organizational strategy development. As summarized by Bailey et al. (2000) these comprise '*command (Bourgeois and Brodwin, 1984), planning (Ansoff, 1965), incrementalism (Lindblom, 1959), political (Pfeffer and Salancik, 1978), cultural (Johnson, 1987) and enforced choice (Hannan and Freeman, 1989).*' The framework provided by Bailey et al. (2000) meets Hart and Banbury's (1994) criteria that model dimensions should reflect '*a pattern of interaction between the roles performed by the top managers and organizational members and represents a resource or skill set available to the firm…moreover, embody [ies] those patterns of action routines which reflect the nature of the strategy making process.'* The model elements were not originally specifically designed to apply to U.N. organizations but as they were intended to apply to a broad variety of organizations in both private and public sectors. Bailey et al. (2000) model is also notable in that it incorporates elements of strategy formulation and implementation as well as incremental and formal planning models entailing the following dimensions:

1. Command Dimension: The command dimension of the process as referred to by Bailey et al. (2000) relates to the degree of control exercised by the chief executive or the Secretary General/Director General if the United Nations. There are two arguments about the role of top executives in organizations. One perspective posits that senior management has responsibility '*for shaping the development of an entrepreneurial culture in which initiative is taking and risk-taking behavior can thrive*' (Birkinshaw et al., 1998; Kanter, 1985; Pinchott, 1985). This perspective posits that top executives are personally responsible for the direction of strategy (Bailey et al., 2000; Drucker, 1970). As described by Dess et al. (1997), an entrepreneurial mode refers to '*opportunity seeking, risk taking and decisive action catalyzed by a strong leader*.' A strong leader can also make rapid unilateral

decisions improving the speed of responsiveness (Eisenhardt, 1989), and are associated with the '*visionary*' aspects of entrepreneurship. This dimension is significantly relevant to U.N. power structure that often senior management has great influences on the direction of organization's future.

2. Planning Dimension: U.N. programme and budget are closely in line with the planning school of thought. However, the debate as to the value of formal strategic planning continues as empirical evidence is inconclusively ranging from tenuous to weak (Boyd, 1991, Capon, Farley and Hulbert, 1994; Miller and Cardinal, 1994; Pearce, Freeman and Robinson, 1987; Schwenk and Schrader, 1993). Brews and Hunt (1999) argue that the inconsistencies relate to the impact of the environment on the planning adopted by organizations. They explain that the planning theory provides conflicting advice, suggesting, on the one hand, that formal strategic planning is positively associated with performance in dynamic environments (Hart and Banbury, 1994; Miller and Cardinal, 1994, Miller and Friesen, 1983) and on the other that it is more suited to stable environments which implicitly assume predictability and that an incrementalist approach is more appropriate for dynamic and discontinuous environments (Fredrickson and Iaquinto, 1989; Mintzberg, 1973). As observed by Brews and Hunt (1999), '*the increased uncertainty of unstable environments requires less formalization and more flexible organic structures*.'
3. Incremental Dimension: As more and more U.N. organizations are emphasising on the incrementalism school, such as UNDP, the notion of dynamic adjustment has been increasingly adopted in U.N. business planning process. The incrementalism approach to strategy development is more flexible than formal planning, focusing more on aspects of strategy implementation (Barney, 1997; Grant, 1995; Menon et al., 1999; Nutt, 1993) and recognising that strategic goals and objectives of the organization are not likely to be precise but general in nature, (Bailey et al., 2000). This approach suggests planning flexibility, or freedom to change strategic plans which Barringer and Bluedorn (1999) found promotes entrepreneurial intensity. The incremental style of strategy development facilitates experimentation, and the entrepreneurial-oriented subsidiary is expected to evidence several features of this model of strategy development. The literature indicates that incrementalism is more appropriate to dynamic environments (Brews and Hunt, 1999) requiring flexibility and entrepreneurial intensity.

4. Political Power Dimension: As poltics is one of the business natures of U.N. organizations, the influence from this dimension is significant to the strategic processes. In this study, we would like to identify to what extent this dimension influences on U.N. organizations. The political power dimension to the strategy development process, relates to the level of negotiating between different powerful groups and the formation of coalitions to pursue their shared objectives. A strong political power dimension suggests that a resultant strategy reflects the interests of the dominant political group. As observed by Bailey et al. (2000), '*the level of influence these stakeholders [the political groups] can exercise is conditional upon the organization's dependency upon such groups for resources.*'
5. Cultural Dimension: Organizational culture, as defined by Deshpande and Webster (1989) is '*the pattern of shared values and beliefs that help individuals understand organizational functioning.*' Covin and Slevin (1991) propose that culture and entrepreneurial orientation have a reciprocal, mutually reinforcing relationship and that while '*clearly, the culture of an organization can strongly affect entrepreneurial posture…entrepreneurial posture will help to shape an organization's culture'*, although the relationship will be ultimately the influence of culture on posture. The relationship between culture and entrepreneurial organizations is also recognized by Cornwall and Perlman (1990) who observed that '*positive cultures support organizational entrepreneurship. In other organizations where entrepreneurship is lacking as a strategic goal, the culture does not encourage risk taking, searching for opportunities, and innovation'*. A strong cultural commitment may increase organizational members '*buy-in*' to strategies and should increase the level of consensus (Menon et al., 1999) and allow managers focus on the substance of their decision (Iaquinto and Fredrickson, 1997).
6. Enforced Choice Dimension: Factors in the environment encourage the adoption of organizational choice structures and activities which best fit that environment such as direct formulation and imposition of strategy direction, by imposing strategy or barriers in the internal environment limiting its operations and its strategic choices. Other policy constraints originate from the external environment and encompass regulative coercion, competitive, economic and normative pressures. External constraints largely comprise aspects of regulation and barriers to growth which are similar to those obstacles experienced by individual firms (Bailey et al., 2000). Bailey et al. (2000) argue that the multidimensional

nature of strategy development means, as with other multidimensional phenomena, that the possible combination of attributes which could exist is potentially infinite. This variety of combinations though is likely to be 'limited by the attributes' tendency to fall into coherent patterns' (Meyer et al., 1993). Consequently, it may be hypothesized that common patterns or configurations of the process occur. However, Pettigrew (1985) has argued that it is necessary to consider strategy development within context because context influences the way in which strategies come about, industry regarding size, ownership structure, scope and so on.

3.2.4 Synthesis

While Strategic Planning has become pervasive in the private and public sectors over the past many decades, strategic planning will need to play a more critical role in 2030 than it does at present. There is no doubt new challenges and opportunities are likely to emerge with increasing rapidity. For that reason, if U.N. governing bodies are to anticipate and manage organizational transformation effectively to address those challenges and opportunities in the 21st century, then making strategy more meaningful and relevant requires transitioning from current concept of traditional strategic planning to a broader view of strategic management, which includes managing an organization's overall strategic thinking, strategic formulation, strategic implementation and learning on a continuous basis, as well as ensuring that strategies are, mostly important, '*integrated*' and '*realized*' efficiently as well as effectively. At present, the strategic thinking, formulation, and implementation phases regarding '*how*' are softly connected from the discussions in the strategic planning process and U.N. Reform agenda that often results in different and arduous interpretations in what overall U.N. performance is. For that reason, U.N. organizations should, e.g. by a configuration approach, integrate their strategic management framework and ongoing performance management processes more closely in a reciprocating relationship in which strategizing is aimed largely at defining and strengthening overall performance while performance monitoring helps to improve strategy process along the way. From this holistic view in strategic management trend, it is also vital in U.N. to transform its traditional strategic planning view to a more configuration focus of strategic management on achieving its ultimate strategic goals.

3.3 Performance Management and Results-Based Management

In the current information age, the growing activism of all kinds of stakeholder puts further pressure on executives, and new codes for corporate governance create additional responsibilities for directors and managers alike. The management of any organization, whether private or public, NGOs or U.N. is held accountable for creating more than just bottom-line results. U.N. executives are required to confront tough challenges in their missions for bringing more added-value results to the organizations. Consequently, U.N. organizations are often looking for some innovative forms of business relationships with their member-states, sectors' partners, and staff. In U.N. organizations, this kind of relationship has gradually transformed into a more formal way of committing to various programmes, missions, and partnerships, with expectations, on achieving higher organizational value and performance. Thus, some intangible assets, such as unique global position, business intelligence, and intellectual properties, (e.g. U.N. organization's knowledge and data) have become primary sources of organizational advantages. As a reaction, organizations have been changing their operating tactics to include the development of closer value-chain partnerships, customization of products, programme, and services, reliance on knowledge workers, and an intense focus on the needs of the global society. Sometimes it is in a practice of cooperation and, at other times, it is in the form of competition.

Concurrently, U.N. organizations have been underway organization restructuring and sourcing non-relevant activities strategically. All these new trends are occurring against a backdrop of organizational reform agenda for gaining better performance. Also, in front of this background, U.N. executives are asked to cope with greater uncertainty and unpredictability than before, often leading to taking a higher risk on numerous programmes' decision making. Another challenge to them is the traditional measurement of performance which has become less relevant in its ability to guide future strategic options, choices and making appropriate decisions. Furthermore, the consequences of making wrong decisions can be disastrous against its original intention on performance enhancement. *Therefore, for the U.N. and its agencies, traditional approaches to performance management seem to be inadequate, leaving senior management to struggle with finding appropriate approaches for effective performance management (more specifically organizational performance management) which today has become increasingly key to the U.N. success and its sustained business.*

There are many reasons why U.N. organizations are not able to meet their performance expectations. *The primary reason is the inability of the organizations to efficiently and effectively define, create and communicate their value-chain to its stakeholder.* The idea that organizations succeed by selling value is not new, but, at times, organizations find it exceedingly difficult to define its strategic position in today's quick-changing global environment. Having a clear vision and a well-defined strategy is just not enough. Having the capabilities to implement continuously, monitor, evaluate, learn, and improve the process is more important than the quality of the strategy itself that requires also integrated performance management to be part of the whole management framework (i.e. Enterprise Architecture) of the organization.

3.3.1 Background

Performance measurement and its management is an indispensable element in modernizing the public sector (Bouckaert, Ormond, and Peters, 2000; OECD, 2000), although it is certainly not a new idea (Bouckaert, 1995a and 1995b). Nonetheless, the concern of emerging corporate performance management systems has become the main focus in the new processes of modernizing U.N. organizations. Today, the trend in performance measurement turns out to be more extensive, intensive, and external. Performance functions involve more features with wide-ranging emphasis on implementation of the strategy, development of a measurement system, an objective setting, related and adequate audit systems. Even if all those elements were sufficiently realized, performance measurement and management could resolve certain problems, but it can also likely create new challenges in management practices. Therefore, having a range of new management practices in place with inadequate or even counterproductive performance measurement and management systems may be worse than having had no reform at all. Furthermore, implementing an inadequate system of performance management can provide a false sense of security and accomplishment and in the process, misdirect resources and activities. For that reason, the first question for organizations to target is '*What is performance and performance management?*'

The definition of performance is as much a challenge as it was to strategy and strategic management. Performance, performance measurement, and performance management all come with many different definitions depending on where it is used, who uses it, and what professional

uses it and in what context. Venkatraman and Ramanujam (1986) argue that the organizational performance is '*at the heart of strategic management and accounting disciplines*.' From an integration perspective, performance management can also be defined as '*a strategic and integrated approach to delivering sustained success to organizations by improving the performance of the people who work in them and developing the capabilities of teams and individual contributors*' (Armstrong and Barron, 1998). From that process perspective, performance management is the process of managing organization's strategy which aims at the systematic generation and control of organization's performance (Melcher, Winter, and Klesse, 2004; Cokins, 2009). According to Tangen (2005), performance can be described as an umbrella term for all concepts that consider the success of a firm and its activities. Performance can refer to actual results/outputs of certain activities, how an activity is carried out, or ability to achieve results (Lönnqvist, 2004). Atkinson (2012) defined performance as the achievement of results ensuring the delivery of desirable outcomes for a firm's stakeholders. Instead of many broad definitions, on the other hand, Cokins (2009) simply defines performance management as '*the transition of plans into results – execution.*'

Performance measurement can be defined as '*the process of quantifying the efficiency and effectiveness of action*' (Neely et al., 1995). Many other researchers have also considered performance measurement as a process (Lönnqvist, 2004; Radnor and Barnes, 2007). According to Lönnqvist (2004), performance measurement is a method used to determine the status of an attribute or attributes of the measurement objects. Radnor and Barnes (2007) state that performance measurement can be defined by quantifying the input, output, or level of activity of an event or process. Atkinson (2012) suggested that performance measurement may also be understood as the regular collection and reporting of data to track work produced and results achieved. According to Fitzgerald et al. (1991), there are two basic types of performance measurement in any organization, namely, those that are related to results (competitiveness and financial performance), and those that focus on the determinants of the results (quality, flexibility, and resource utilization) (Neely et al., 2000).

Performance management, according to Bititci et al. (1997), can be considered as a process by which the organization manages its performance in line with its corporate and functional

strategies and objectives. Performance management is a philosophy which is supported by performance measurement. Performance management precedes and follows performance measurement, in a virtuous spiral, and performance management creates the context for performance measurement (Lebas, 1995). Performance management is thus an action based on performance measurement, which results in improvements in behavior, motivation, and processes (Radnor and Barnes, 2007). Further, Radnor and Barnes (2007) consider that performance measurement is about efficiency, productivity, and utilization, whereas performance management builds on performance measurement and is concerned with effectiveness and a broader, more holistic, even qualitative view of operations and the organization. Performance management is also about improvement to create value for and from customers with the result of value-added economic creation to stakeholders and owners (Cokins, 2009). Atkinson (2012) concludes that performance management is about what you do with the information developed by measuring performance. It means using performance measurement information to focus on what is important, to manage the organization more effectively and efficiently, and to promote continuous improvement and learning. Ates et al. (2013) described performance management as an iterative closed-loop process aimed to manage and improve individual and corporate performance through continuous adaptation to the changing operating environment. Earlier in much of the academic literature traditional performance management has been financially biased by focusing only on the inside of the organization on cost and budget variance data. The balanced scorecard literature widened the concept of performance management by making executives look externally. As a result, nowadays organizations are focusing on a wider range of stakeholders to ensure they pay attention to all the important facets of performance (Bourne et al., 2003).

Convincingly, although widely used in theoretical and empirical research, the notion of organizational performance remains largely still unexplained. There is relatively little agreement about which definitions are fit-for-purpose and which criteria should be used to judge the definitions (Barney, 1997). Moreover, many definitions capture the notion of performance only partially. The reason why organizational performance is so difficult to define is likely because of the multidimensional nature of the performance concept. According to Barney (1997), a conceptual definition of organizational performance is that an organization is an association of productive assets which come together to obtain economic advantages. In private sector, for an organization

to continue to exist, the owners of these productive assets must be satisfied with their use. The owners will only be inclined to provide these assets if they are pleased with the returns they are receiving. Therefore, organizational performance is defined regarding the value that an organization creates using its productive assets in comparison with the value that the owners of these assets expect to obtain. If the value that is created is at least as large as the expected value, then it is likely that the owners of these assets will make them available to the organization. On the other hand, if the value created is less than expected, the owners might look for other alternatives and withdraw their support. In the U.N., the focus of performance management is more on the enhancement of existing service value through quality improvements and the implementation of programme and mission being closely in line with member-states' expectations.

Performance measurement

Performance measurement can be viewed as the process of quantifying the efficiency and effectiveness of purposeful action and decision-making (Waggoner et al., 1999). Performance measurement should provide the data that will be collected, analyzed, reported and, ultimately, used to make sound business decisions. In theory, it is a broad concept applicable to people, things, situations, activities, and organizations. Organizations use performance measurement for various purposes. A typical performance measurement helps businesses in setting business goals periodically and then providing feedback to managers on progress towards those aims (Simons, 2000).

Performance measurement and management are an important link in the control structure of organizations (Ferreira and Otley, 2009). Franco-Santos et al. (2007) identified five roles of performance measurement.

1. Measure performance refers to monitoring progress and measuring and evaluating performance.
2. Strategic management includes planning, strategy formulation, strategy implementation, and focusing attention on issues important to an organization.
3. Communication refers to internal and external communication, benchmarking, and compliance with regulations.

4. Influence behavior is the role that encompasses rewarding or compensating behavior, managing relationships, and control.
5. Learning which comprises feedback, double-loop learning, and performance improvement.

Similarly, Henri (2006) classifies four types of performance measurement use: monitoring, attention focusing, strategic decision-making, and legitimization. Moreover, performance measurement is used to provide feedback regarding expectations and to communicate with various stakeholders through the monitoring process. During the decision-making process, it is employed as a facilitator, strategic decision-making and to justify decisions or actions through legitimization process. Also, top managers use performance measures to send signals throughout the organization (Franco-Santos et al., 2007).

Performance measurement can result in many advantages for organizations. De Waal and Kourtit (2013) identified four benefits of performance measurement: higher results orientation, better strategic clarity, great people quality, and high organizational quality. Martinez (2005) presented eight benefits of performance measurement. It focuses people's attention on what is important to the firm, results in improvements in business, improves customer satisfaction, increases productivity, aligns operational performance with strategic objectives, improves people's satisfaction, aligns people's behaviors towards continuous improvement, and improves organizational reputation. This stream of literature has suggested that performance measurement affects positively many organizational capabilities and processes.

Performance management

Apart from the multidimensional nature of the performance concept, performance management literature also suffers from concentrating too much on finding the appropriate performance measures. By adding some quantity data, strategic performance measurement is defined as the measurement and reporting system that quantifies the degree to which managers achieve their objectives. Most definitions stress the importance of having formulated goals, aims, and strategies, primarily at the organizational or corporate level. Then, the purpose of performance management is to achieve organizational effectiveness and '*to get better results*.' Important aspects of performance management are setting performance goals, developing strategies, and translating

them into concrete guidelines for action, i.e. making the strategies operational. Performance management is also about creating commitment and motivation to realize the proposed goals. Communication plays a major role in this process.

Originally, performance management was developed for the private sector for improving employee performance to pursue overall corporate performance. Some studies focus on appraising '*past performance*' of the employee and the organization. However, the innovative concept of performance management adds the future performance notion to the governance structure, and further to explore various new management strategies in achieving organizations' goals (Beer et al., 1978). To propose the innovation of '*no measurement, no performance; no performance, no management*,' these management techniques and methods have been adopted by an increasing number of private enterprises, and have recently received attention from U.N. executives. These strategies include strategic planning, performance, performance monitoring, and total quality management. These similar techniques, generally applied, explain the increasingly significant role of performance management as a response to U.N. Reforms. The original intention of promoting performance management in private enterprises with limited resources is to not only manage financial expenses efficiently but also to innovate and achieve higher performance goals. With the widening of application areas of strategy and management tactics to performance management, researchers from various sectors have started giving performance management different foci.

3.3.2 Adaptation of performance management to the U.N.

Traditional performance management focuses on developing the competence and responsibility of organization members to achieve goals of the team. In other words, general performance management is the process of encouraging employees to meet the organization's requirements for increased efficiency and effectiveness in their working areas. Alternatively, Marr (2005) in relation to '*business performance measurement and management*,' defines performance management as following:

1. Performance measurement complies with administration;
2. Performance measurement and management must be linked to organizational goals; and
3. To achieve overall performance management, organizations must consider the methods, structures, goals and strategies of performance measurement.

From a '*Micro*' perspective to performance management, Armstrong (2008) pointed out that the application of performance management is to improve the organization members' performance by developing the capability of the team and its members through a strategic and integrated system which can encourage organizations to operate successfully. Lunger (2006) argues further that '*modern performance management must originate from organizational development strategies, goals and values, the coordination functions of performance, the satisfaction of internal and external customers, the focus on group and team performance, the emphasis of cross-sector and cross-function appraisal, the performance monitoring and development, the evolution of performance measurement with time, and sustained growth'*.

From the '*Macro*' perspective to performance management, Poister et al. (2015) proposed a performance management framework, organized institutional thinking strategically toward key performance goals and strived to orient decision-making toward greater use of performance information to stimulate improvement. That is an ongoing cycle of key organizational management processes, all of which interact in meaningful ways with performance measurements. The conceptual framework is based on the continued interplay among performance measurement and reporting, strategic planning and other types of planning, budgeting, ongoing management and performance measurement and reports, as shown in Figure 7.

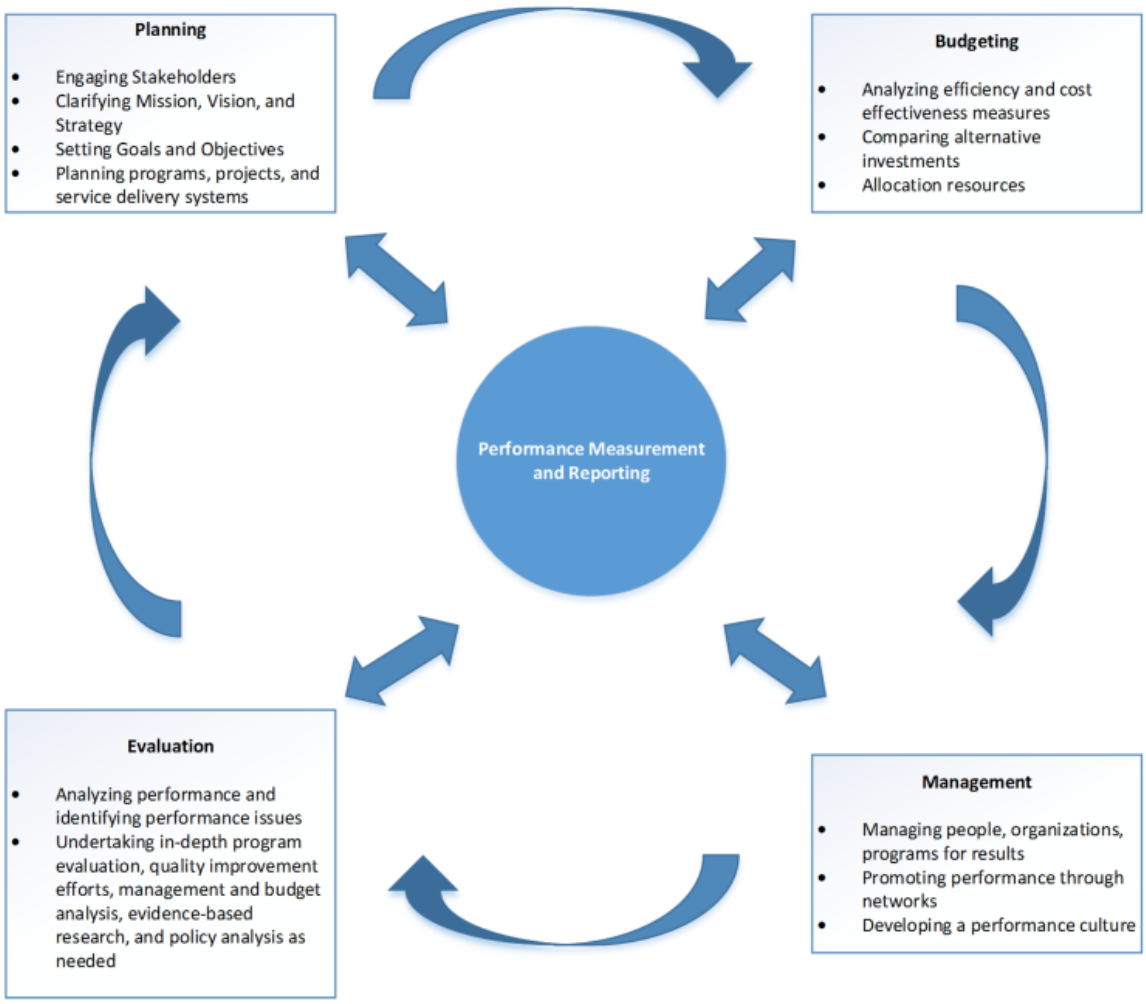


Figure 7: The Performance Management Framework (Poister et al., 2015)

Various theories, definitions, and methods based on performance management have eventually become significant political tools for improving the performance of U.N. organizations. The reforms undertaken by the U.N. organizations led to a renewal of performance management systems. Research has shown that challenges in the design, implementation, and management, (and '*questions their effectiveness as policy tools for increasing governmental accountability*') (Heinrich, 2002), are still persistent today. Accordingly, proponents of Corporate Performance Management (CPM) systems often promote the idea that CPM systems facilitate the implementation of the organization's business strategy, and by doing so improve overall organizational performance. This basic idea explains what CPM systems are supposed to do, but it fails to explain how. For that reason, it is worth to assess the effects of performance management systems from previous studies.

Appendix C summarizes research studies, grouped by people's behavior, organizational capabilities, and performance, of corporate performance management; the impact of CPM systems on organizational capabilities regarding strategy processes, communication, strategic capabilities, managerial practices, and corporate control; and CPM systems that have been found to influence performance at all levels of the organization.

Bouckaert and Peters (2002) argue that the virtues of performance measurement and performance management are well-known, but they do not solve all problems and also exacerbate existing problems. Some of these potentially adverse consequences of adopting performance management structures in U.N. are elaborated.

1. Strategic Alignment: (i.e. strategy-fit, is not a new concept.) There is a substantial amount of literature in management control, which investigates the relationship between management control structure and strategy (Miles and Snow, 1978; Porter, 1985; Miller and Friesen, 1982). The concept of strategic alignment has been approached in a fragmentary way (e.g.,. traditional contingency research is conceptualized differently from the strategy concept). As a result, Porter (1980), Treacy and Wiersema (1995) and Miles and Snow (1978) developed frameworks, which are very different in nature. The frameworks of Porter (1996) and Treacy & Wiersema (1995) focus on the content of strategy. However, Treacy and Wiersema (1995), also, pay much attention to describing the organizational implications of a particular strategic choice. The framework developed by Miles and Snow (1978) is slightly different and offers a theory of strategy dynamics, i.e. prospector, analyzer, defender, and reactor, and aligns these four types of underlying organizational processes. By further extending Miles and Snow's (1978) framework, Chakravarthy and White (2002) identified four '*new*' strategy dynamics: consolidating, improving/imitating, migrating, and innovating. According to Chakravarthy and White (2002), '*this typology provides an approach for integrating process research on business, corporate and international strategies -as well as research on steady state (consolidating) and change (improving/imitating, migrating, innovating).*' All above contingency research is showing one common problem in performance management research that they only stay

within their interested domains with just softly touched if needed, some topics in the other areas that often resulted in the framework only representing a corner view of the whole picture.

2. Invisible versus Visible Cost: Performance management has significant advantages. However, there are always considerable costs associated with it. There is a marked asymmetry of the information on costs and benefits of performance measurement and management. Benefits accrue from the use of information in different processes and are difficult to calculate. Costs are spread over time. In current U.N. International Public Sector Accounting Standards accounting practice, high costs are incurred in the annual accounting book first, and benefits are supposed to emerge later, which is likely invisible to the accounting system. That makes costs more visible than the sometimes intangible and expected benefits from performance management, with attendant political problems.
3. Motivation versus Demotivation: The creation of best practice can have a motivational effect. However, it is not feasible for all U.N. organizations to achieve best practice. Best practice triggers the question of the acceptability of the diffusion practices being associated with a variance of results in bottom lines, and in the end, may be demotivating for some organizations and individuals.
4. Quantity versus Quantity and Quality Measurement: Performance questions are shifting from quantity to quantity and quality. The tension that arises as a result of this change is that quality always is related to price/quality trade-offs, whereas quantity tends to have a stable relationship with costs. Thus, measuring quality may face a difficult political battle when confronted with the option of providing more with lower quality service. This problem is worsening due to U.N.'s fixed budget cycle. With changing increasing demands, more quality of services in the middle of the budget cycle will increase considerable pressure to the fixed budget to accommodate those new requests results in stronger resistance in performance improvement and positive organizational change.
5. Trust versus Contract: Performance related behaviors may be legally documented into contracts. However, the merits of contracts are not always obvious since it involves costs, i.e. inputs, to exchange benefits, hence results. The cost of contracts includes not only the cost of designing the contract but also the cost of monitoring the implementation according to the terms of the contract and its performance evaluation in the end. The cost of a control

system, such as the cost from human resources department, may be invisible and considerable, having said that, the better the contract, often the more costly the monitoring. *The alternative strategy is to invest in trust which is, or in principle could be, cheaper and more sustainable in a U.N. context.* Management becomes a matter of an appropriate mix of confidence, on the one hand, and, performance-based guidance, control, and evaluation on the other. *Due to the nature of complexity among U.N. organizations, one size of such strategy does not fit all.*

6. Performance Indicator versus Resources Allocation: The link between performance and resources is an important issue. If more performance, results in more resources, there may be a question of dividing the efficiency yield. If less performance, results with fewer resources, there is a question of maintaining the bottom line. The question of the marginal utility of resource allocation interferes with the discussion of motivation within an organization. Also, political primacy may conflict with the link between performance and resources. Lastly, in times of an emphasis on budget savings, performance is a contrary indicator in the processes of resource allocation.
7. An Effective Measurement System: The measurement may be functional or dysfunctional in a managerial system. A clear picture of the pathologies of measurement is crucial to prevent measurement systems becoming dysfunctional, technically weak due to low quality in validity and reliability, and having low legitimacy (Bouckaert, 1995). Unfortunately, managers are not always well-informed about these pathologies by the advocates of measurement and performance. The organization decision makers, therefore, adopt measures that are too weak or demanding, and that may divert attention from achieving fundamental goals and toward small activities.
8. Perception and Expectation: Performance needs to be related to satisfaction, and satisfaction needs to be linked to trust. Perceptions and expectations complicate such connection between performance and satisfaction. The relationship between satisfaction and trust is even more complex. Presentation of results may affect perceptions and expectations. Therefore, public information, public communication and public relationship, internal and external, has a significant influence on the perception and the expectation of the results by organizations.

With the continuous progress of globalization, communication networks connecting the entire world increase uncertainty as each part of the world, virtually interact influence and change each other. Especially, during this ever-changing knowledge-oriented era, U.N. organizations adopting a simple linear strategy can no longer be able to face the current openness, agility, conflicts, randomness, and uncertainty of the environments they operate in. Therefore, multi-faceted organizational structures are on the rise. That phenomenon indicates the higher degree of dependence between organizations members and the components of the external environment. Consequently, the interface relationship (that is at the point where the organization interacts and engages with the elements of the external environment) is becoming more diversified. To face this challenging new environmental dynamics, which continues to change dramatically, the U.N. and its agencies may fail to improve their efficiency and effectiveness mechanisms by adopting private-sector performance management methods. Today, most U.N. organizations follow a variation to the corporate sector performance management practices – the RBM approach. It is worth elaborating on the RBM approach as a number of U.N. agencies has been attempting to implement and adopt it to control and monitor their results.

3.3.3 Application of results-based management to the U.N.

Different U.N. organizations define results-based management in a variety of ways, yet there is a strong common denominator among those definitions. All definitions reflect the underlying idea of learning from empirical evidence based on experience and using that information to manage. The Organization for Economic Cooperation and Development-Development Assistance Committee Managing for Development Results Source Book addresses RBM as: '*Results-based management asks managers to regularly think through the extent to which their implementation activities and outputs have a reasonable probability of attaining the desired outcomes and making continuous adjustments as needed to ensure that the results are achieved.*' For results-based management to be successful, U.N. organizations develop and nurture a culture of results where enquiry, evidence, and learning are considered essential to the proper management with aims to improve management effectiveness and accountability by '*defining realistic expected results, monitoring progress toward the achievement of expected results, integrating lessons learned into management decisions and reporting on performance*' (UNDP, 2009). For that reason, the objective of U.N. results-based management is to '*provide a coherent framework for strategic*

planning and management based on learning and accountability in a decentralized environment.' RBM in U.N. rests on four main pillars:

1. The definition of strategic goals which provide a focus for action;
2. The specification of expected results which contribute to these aims and align programmes, processes, and resources behind them;
3. On-going monitoring and assessment of performance, integrating lessons learned into future planning; and
4. Improved accountability, based on continuous feedback to improve performance.

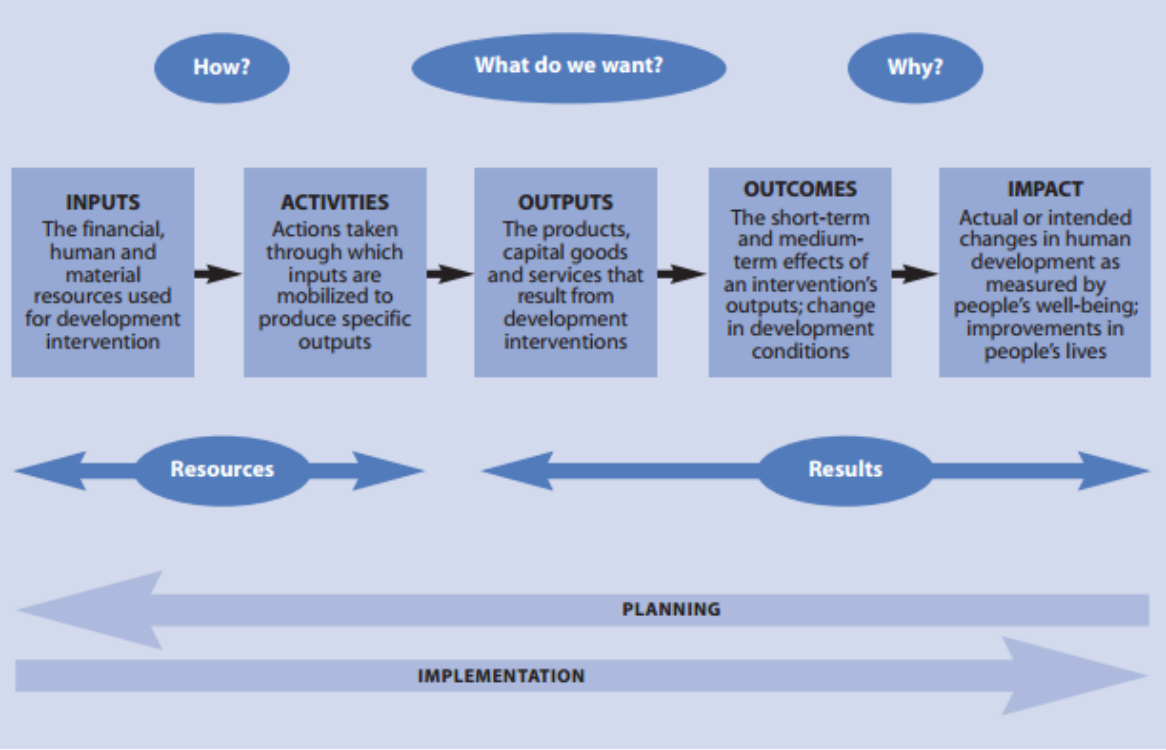


Figure 8: Results-Based Management Results Chain (UNDP, 2009)

According to the RBM process (see Figure 8), inputs and the activities which transform them into outputs reflect the process of implementing projects and programmes rather than desirable end results in themselves. From a results perspective, the implementation process is significant only regarding what it leads to or what follows from the process of planning, managing and implementing. Outputs are the specific products and services which emerge from processing inputs through the programme or non-programme activities. Outputs, therefore, relate to the

completion (rather than the conduct) of activities and are the type of result over which managers have a high degree of influence. However, outcomes are actual or intended changes in development conditions. The government of Canada defines outcome as '*an obvious consequence attributed, in part, to an organization, policy, program or initiative. Outcomes are not within the control of a single organization, policy, program or initiative; instead, they are within the area of the organization's influence. Outcomes are usually further qualified as immediate, intermediate, or ultimate (final), expected, direct, etc...*' According to UNDP (2009), '*outcomes present a stage of a change in development conditions between the completion of outputs and the achievement of impact*' (see Figure 9).

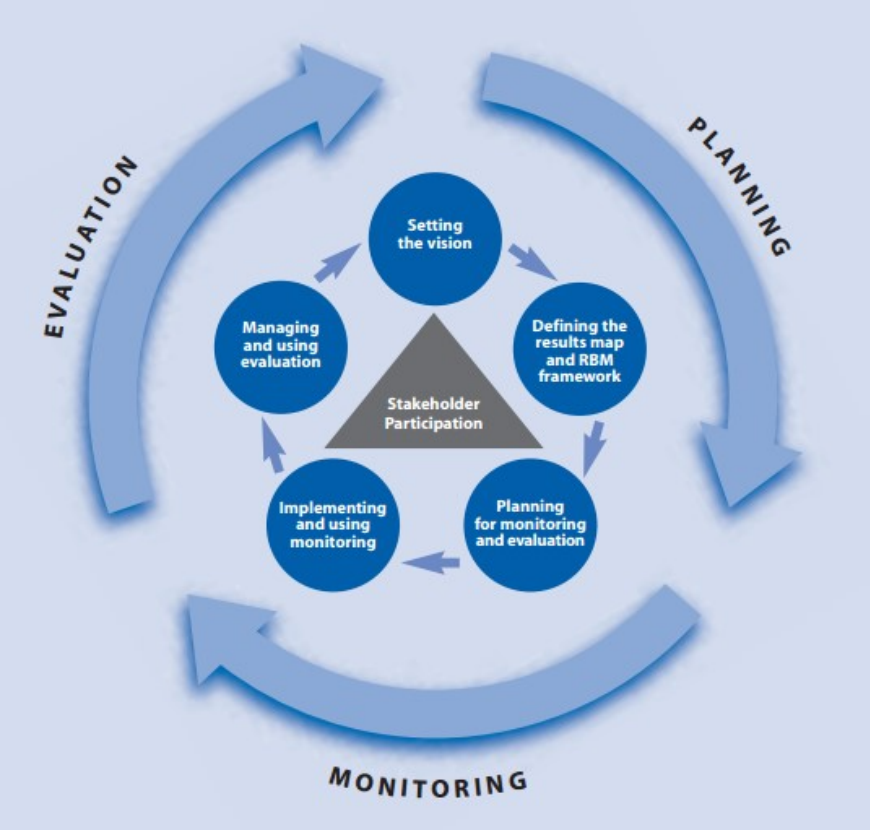


Figure 9: Results-Based Management Lifecycle approach (UNDP, 2009)

This section offers some concluding remarks about the state-of-the-art of results-based management and remaining challenges facing U.N. organizations, elaborated in Appendix C. The member-states are increasingly asking aids, and there are growing pressures on U.N. agencies to show development results. This is part of a much broader trend in the U.N. to be more effective and performance-oriented. Member-states want and expect the U.N., like other domestic

government agencies, to be accountable for and report on the results. In response, many U.N. organization have been establishing performance measurement and management systems to complement their more traditional monitoring and evaluation systems. Nevertheless, on the one hand, U.N. agencies face unique challenges in developing effective performance measurement and management systems that are different from, and in some ways may be harder than, the challenges faced by most other agencies. On the other hand, progress and experience with results-based management systems differ considerably from agency to agency. Some organizations reviewed (e.g., UNDP, and UNOPS) have accumulated nearly a decade of experience with implementing performance measurement and management systems. However, most are still in early stages of developing their systems. Therefore, this review would help U.N. in establishing a unified understanding and results-based management of thought to achieving its ultimate performance-based results.

3.3.4 Synthesis

For ensuring its success, results-based management should not only connect all performance management processes and activities in a framework but also be in line with the organization's strategy, i.e. strategic alignment. Accordingly, integrated performance management emphasizes on integrating critical activities that lead to enhancing organizational advantage and long-term growth. Thus, the strategy is a central element for every performance management system. In some U.N. organizations, how a strategy is formulated and how it is implemented are managed through independent activities with different budgets, resources, timetable, and priorities. For that reason, strategic alignment is an absolute prerequisite for effective performance management that is increasingly acknowledged in the management literature. Kaplan and Norton (2001) state that strategy implementation requires that all business units, support units, and employees be aligned and linked to the strategy. In doing so, effective performance management provides a systematic link between organizational strategy, resources, and processes. Thus, aligning operational and management processes to key performance indicators that capture the results of business strategies is at the heart of successful strategy implementation (Institute of Management Accountants, 1998; Knight, 1998; Ashworth, 1999).

One might say that change and change management in U.N. organizations is driven by strategic (and politically influenced) purpose. Primarily as political entities, member-states impose continuously evolving requirements driving the U.N. agencies to higher levels of performance and performance management. Change, strategy, and performance underpin the conceptual viewpoint of evolution and adaptation within a U.N. organization. At this point, the realization of this conceptual viewpoint entails the understanding of (which is the second part of the literature review) enterprise architecture and project management.

3.4 Project Management

Managing projects constitutes the implementation of strategy and change at the operational level. It is at the level of projects definition and management that the realization of strategy and change in an organization occurs. Only with the right portfolio of projects and the adequate capacity and capabilities built can vertical alignment within an organization be possible. Therefore, project management is a significant piece of the 'change management' puzzle if not the most important one, simply due to the fact that most of the production activities occur at that level. To that effect, this section reviews project management literature and puts it into the U.N. lens.

In today's rapidly changing world, the dimensions of project management in organizations is constantly growing and expanding. As a result, organizations have increasingly been incorporating programme management, project management, and portfolio management methodologies, frameworks and practices into processes to help in realizing their strategic objectives and stay closely in line with overall vision and goals. As a reaction to this, since the early 2000s, IT departments in some U.N. organizations have deployed a project management training initiative and have implemented its project management framework. This initiative was adopted as a mean of increasing the odds of project success and, yet, as a mechanism to cope with the ever-growing demands from the member-states. Hence, this project management section reviews the effects of success and failure factors of project management and its connection with strategic planning and formulation, aiming for a better understanding of the overall effects of its implementation in the U.N. context.

3.4.1 Background

Projects adopted as a practical device to implement strategic goals, and a means to realize change, is a relatively new concept as compared to traditional approaches to project management linked with new product development (Artto, Martinsuo, Dietrich, and Kujala, 2008). Further tentative developments in strategy in the project management literature arose with the evolution of programme management, portfolio management, and enterprise-wide approaches to project management (Pelligrinelli et al., 2007; Jamieson and Morris, 2004). Ever since the year 2000, the inspiration of project management has grown and continues to be commonly adopted throughout the world. Evidence of that growth is the professional training and certifications of project management associations such as PRINCE2® and PMP® who continue to grow significantly. For that reason, some researchers predict the demand for project management professionals will continue to surpass supply.

However, over this same period, the strategic management literature has not enjoyed the same progress as project management. The strategic management literature differentiates strategy planning and formulation for strategic implementation (Fiegener, 1990), with strategy formulation being the dominant theme. There have been many calls for further research focus on the strategy implementation, but they have gone largely unheeded (Alexander, 1991; Pinto, Clelend, and Slevin, 2003; Bossidy and Charan, 2002). Mintzberg (1994) described the failure of strategic planning to produce the expected results despite decades of intensive effort might explain why research into strategy implementation has not made much progress. With its gradual decline, strategic planning teams and three-five years strategic plans had to focus their attention on finding and developing new approaches to strategy formulation – This resulted in the resource-based and dynamic capabilities view of the organization. Mintzberg and Waters (1985) suggested that disruptive change had rendered ineffective the analysis of past trends as a technique to predict and plan for the future. Consequently, organizations have steered away from deliberate and planned approaches and relied instead on patterns of strategy.

Even project management and strategic planning share similar origins and use similar concepts and techniques to conceive and control implementation outcomes; the different trends are disturbing. The concepts that underpin strategic planning also underpin project management, programme management and portfolio management (Lycett, Rassau, and Danson, 2004). These concepts have much less credibility with senior management audiences, at the same time, project,

programme, and portfolio management are heavily depending on senior management support for their success (Pinto, Clelend, and Slevin, 2003). As a result, the current approaches to project, programme and portfolio management may have an uncertain future and perhaps are destined for failure. Nonetheless, given the shared origins between project management and strategy, there has been attempts to join both disciplines, i.e. strategic fit. In the project management literature, that idea has resulted in the development of the concepts of project strategy alignment.

Project management literature indicates that projects are undertaken to meet organizational goals and align to an organization's strategy (Cleland D. I., 2004; Archer and Ghasemzadeh, 2004; Dietrich and Lehtonen, 2005; Milosevic and Srivannaboon, 2006; Cooke-Davies, Crawford, and Lechler, 2009; and Srivannaboon and Milosevic, 2006). This bottom-up approach which focuses on the alignment between projects and strategy is firmly influenced by the work of Ansoff (1965). The concept of alignment is also applied to project portfolios. When projects and programmes are added to a project portfolio, strategic fit to the organisation's strategy is recommended as a key criterion (Archer and Ghasemzadeh, 1999; Archer and Ghasemzadeh, 2004; Cleland, 2004; Dietrich and Lehtonen, 2005; Dinsmore and Cooke-Davies, 2006; Cooper, Edgett, and Kleinschmidt, 1999; Kaplan and Norton, 2008). However, despite the heavy emphasis on alignment in the literature, there does not appear to be any empirical studies of alignment. Therefore, this study will examine the degree to which projects can be aligned to strategy in U.N. organizations.

3.4.2 Adaptation of project management to the U.N.

Project management tools and techniques tend to be mechanistic and linear and have not changed since the industrial revolution. Morris (1994) proposed order and structure as the best means of control that gave a way to manage uncertainty and deliver project outputs on time and budget. At the strategic level, that approach required hierarchical links between individual projects and a documented and articulated strategic plan. The desired result is a cascade down from strategy to programmes and projects (Ansoff, 1965). The prerequisite for this approach to work is a clearly defined and articulated strategy regarding strategic objectives, targets, and measures (OGC, 2007 and 2009).

Over the same period, Shenhar and Dvir (2007) tried to draw out the views of project management evolution by studying the relationship with its performance in the fields of technology and innovation management research, new product development research, the direction in the entrepreneurship literature and operation management. Their studies revealed that very few of these directions had made a significant enough influence on the discipline and practice of project management. They also suggested that research in the area can be grouped in four views, listed in Table 5 below, respectively, of what project management is all about.

1. Operational/Process: The first and most traditional view sees a project as a sequence of process/structure-oriented activities that have to be performed and completed according to plan, referred to here as the operational/process view, well defined in PMBOK® and PRINCE2® methodology.
2. Team Leadership: The second view is based on team leadership. It looks at projects as an organizational team that needs to be led, coached, and motivated.
3. Strategic/Business: The third view, the strategic/business view sees projects as business-related activities that need to achieve the project's business results.

View	Process	Leadership	Strategic alignment
Key Paradigm	A project is a series of work packages and tasks to be completed	A group of project people to lead and motivate toward a common goal	A project is a strategic activity, contributing to achieving a large business objective
Unit of Focus	An individual project or subproject	A team of individuals working on a common mission	A portfolio of projects
Critical Success Factors	Operational Success such as project completed on time, within budget, and meeting project key performance indicators	Success as a team such as effectiveness, productivity, morale, learning	Business success with impact on customer, business, and results

Project Managers' Accountability and Role	Responsible for delivering project on time	Building and motivating the team for coordinated work	Creating business results and value

Table 4: Three Major Views of Project Management

Each view is entirely different with its assumptions, uses different metrics of success, and defines the project manager's role in a different way as shown in Table 5. The three views are also described in the following Table 6 as they related to their major research implications—the theories, the possible methods, and perhaps most important—what are the other disciplines that can contribute to additional views to studies in project management.

View	Process	Leadership	Strategic alignment
Theories	Process Theory Optimization Network Theory	Behavioral Theory Leadership Organization Theory	Strategic Management Resource-Based View Economics Knowledge-Based View
Methodologies	Mathematical Programming Simulation Statistical Analysis	Case Studies Field Studies Empirical Analysis Qualitative Methods	Models Case Studies
Related Disciplines	Operations Research Information Science Decision Science Management Information Science	Organization Theory Human Resources Management	Budget and Finance Strategic Management Commerce

Table 5: Theoretical and Research Implications

Project Portfolio (or programme) Management

In reviewing the literature, we found that the project portfolio management concept is addressed in various ways (Elonen and Artto, 2003) by various researchers. That is still ongoing

until the present. Programme management (which is viewed as the combination of some projects managed under a single programme) entails closely related concepts. Programme management is meant to adapt to change and be a tool for strategy implementation (Artto et al., 2008). The main strength is the recognition that programmes, rather than individual projects, are needed to realize strategic goals. In theory, projects can be added to or dropped from a programme as required to respond to changes. However, programme management is far from a mature discipline (Stretton, 1992). The literature is sparse with very few published works (Williams and Parr, 2004; PMI, 2008; Reiss et al., 2006; Milosevic, Martinelli, and Wadell, 2007; OGC, 2007; Thiry, 2010) and only one with a strategic orientation (Pelligrinelli, 2008). Somewhat curiously, all texts start by commenting on the lack of available guidance. Milosevic et al. (2007) explain that programme management originated in the U.S. aerospace and defense industries where it was kept secret for decades. They add that it was only in the 1980s as people moved did programme management take hold in the commercial sector, and even then, it was sometimes only the term being misapplied by project managers to the management of large or multiple projects. The strategic orientation of programme management is seen in the leading methodology '*Managing Successful Programs'* that focuses on the delivery of change (OGC, 2007). The only other well-known methodology Standard for Program Management is more project-oriented and focuses on new product development (PMI, 2008).

Some have questioned whether current portfolio management practices are meeting the intended goals or the needs of a modern project-based organization. Krebs (2009) suggests that current portfolio management tools and techniques are not enabling organizations to effectively deal with the emergent and dynamic nature by which projects are identified, commenced, managed and canceled. The PMI (2008) and OGC (2009) portfolio management frameworks imply that dynamism occurs through portfolio balancing, yet they depend upon rational, mechanistic and linear processes to determine, on a quarterly or annual budget cycle, a project's alignment or '*fit*' with an organization's strategy and priorities. Like planning at the project level, portfolio management assumes there is a strategy that is understood and that the strategy is stable enough over the planning timeframe because the operating environment is stable. However, the assumption of stability behind portfolio management practices is unlikely to be valid. The business climate since 1994 was reported to be swayed by unpredictable forces such as globalization, deregulation, technological discontinuities and environmental concerns (Prahalad and Hamel, 1994; Emery and

Trist, 1963). Today, there are clear indications that these conditions continue to sway the business environment.

The process of project portfolio management has significant connections with other processes in the organization. The view of different process levels for product strategy, project portfolio management and pipeline management can be further extended to get a complete description of the connections of project portfolio management with other internal processes. As one of the purposes of project portfolio management is to secure a strong relation to the business strategy, the first connection upwards in the process hierarchy presented in Figure 11 is the strategy.

Figure 10: The Context for Project Portfolio Management

The project portfolio management approach does not deal with the creation of the business strategy. Instead, it is the process of putting the strategy into effect. The strategy on this level refers both to the business strategy and to the product strategy supporting the business strategy. The next connection upward is the link towards the vision or mission of the firm. As the vision's role is to guide the strategy (McGrath, 2001) it thereby connects the portfolio management level to the most upper level of the business objectives.

In the literature dealing with related concepts, project pipeline management was described as the next process level below the project portfolio management level. The project pipeline management level plays a major role in realizing the project portfolio plan derived from the project portfolio management process. However, it also provides valuable input on the state of the ongoing projects in the portfolio. The process level further down includes the individual projects' management, which entails leading and following up projects about purposes, schedules, and budgets.

While there has been significant developments and further empirical research conducted in the discipline of project, programme and portfolio management, there are still a number of important shortcomings to the project management approach, listed in Table 7 below.

Shortcomings	Explanation	Researchers
Lack of top management support	Top management support is essential for project success; it is impractical to require boards and senior manager to spend more than a portion of their time on projects. Mechanisms and processes are needed to ensure top managers intercede in projects at the right moments.	Young, et al., 2012; HB280, 2006; Young and Jordan, 2008; Lederer and Mendelow, 1988; Pinto, Clelend, and Slevin, 2003; Garrity, 1963; Rockart and Crescenzi, 1984
Out-dated long-period planning concepts	Long-range forecasting (two years or longer) has been found to be notoriously inaccurate.	Mintzberg and Waters, 1985; Hogarth and Makridakis, 1981
Isolation of Project Management Literature	Very few project management papers are exported to the general management audience.	Thiry and Deguire, 2006; Shenhar and Dvir, 2004; Winter et al., 2006; Sauer and Reich, 2009
Lack of understanding the interaction between project management and strategic management in literature	Some concepts from some strategic management schools have been incorporated into the project management literature, but these seem not to be well understood.	Cooke-Davies et al., 2009; Srivannaboon and Milosevic, 2006; Morris and Jamieson, 2004; Milosevic and Srivannaboon, 2006; Winter et al., 2006; AS8016, 2010; Young and Jordan, 2010; Crawford, 2004

Do project portfolios management deal with strategy?	It is unclear how a project portfolio would help an organization achieve strategic outcomes, particular in an increasingly dynamic environment where strategy is emergent, or there is no documented and promulgated strategic plan.	De Reyck et al., 2005; Thiry and Deguire, 2006
Lack of understanding of the Increasingly Dynamic Environment	Dynamism and emergence are challenging concepts to the linear, rational and mechanistic '*Planning School*' because this school is best suited to operate large machine bureaucracies in a simple, stable, predictable and controllable context.	Burns and Stalker, 1961; Dill, 1958; Thompson, 1967; Collyer and Warren, 2008; Van Der Merwe, 2002

Table 6: Summary table of some research papers about Project Management shortcomings

3.4.3 Application of project management to the U.N.

Saadé and Wan (2015 and 2017) reported that project management issues addressed in the literature are (a) evolution of project management, (b) factors of success core to business function and (c) style of leadership. In this study, the body of research that was reviewed revealed that it was evident that an ongoing attempt is made to explain the various dimensions/factors of success/failure that influence project outcomes. That is most probably due to a large amount of literature reporting that a quite significant percentage of projects across different organizations are not completed on time or are over budget. Despite that, some projects were completed on time and within allocated budget, many from those projects reported that they did not meet primary requirements, did not satisfy management/customer satisfaction and were not aligned with organizational objectives and vision. Studies indicated that 85% of projects do not meet planned duration and budget allocation, with an average overrun of 70% in planned length and 60% in the planned budget (Shenhar and Dvir, 1996). These statistics continue to place increasing pressures on organizations to introduce more project management training to their employees and to hiring certified project management professionals. Shenhar and Dvir (2007) have studied the relationship of project management and its performance in the fields of technology innovation management, new product development, entrepreneurship, and operation management. Their analysis revealed that very few research works have made a significant influence on the discipline and practice of project management and therefore directly implicating project managers. They consolidated their

findings into three primary views of what project management is all about, and which we synthesize here as they impact project manager's role, as follows:

1. A project as a sequence of process/structure-oriented activities that have to be managed by the project manager (performed and completed by team members according to plan) - Operational/Process
2. Projects as an organizational/professional team that the project manager needs lead, coach, and motivate - Team/Leadership
3. Projects are business-related activities that the project manager needs to achieve regarding project's business results - Strategic/business Each view is entirely different with its assumptions, uses different metrics of success, and defines the project manager's role in a different way.

Hyväri (2006) also studied the CSFs (Critical Success Factors) as a function of organizational background and compared the results with those of Pinto's (1996). In those studies, a ranking procedure was utilized to make sense of the importance of CSFs. Participants ranked communication, client consultation, and client acceptance as important factors of project manager's ranking in previous studies (Finch, 2003). Moreover, Finch (2003) conclusively showed that project manager leadership was critical to effective project management. It was also found that the most significant critical factors were managerial-related. All recent evidence supports the notion that successful project managers possess a balanced mix of technical abilities, management knowledge, and leadership skills. These results support the findings in Hyväri's (2006) study in that the relationships with project success factors and organizational background variables were found to be communication, client, and end-user commitment.

A complete study and analysis of project management in the U.N. context can be found in Saadé and Wan (2017) and for reference can be found in Appendix D. The results from that study stress the school of thought that attributes project manager related factors as the most important to support the notion of successful projects. These so called successful projects are led by individuals who possess not only a strong blend of technical and management knowledge/skills but also leadership and communications qualities. Moreover, it seems that U.N. organizational setup entailing job roles, project structure, and Information Technology (IT) infrastructure is perceived

to be less important for project managers to do their job effectively and efficiently. As a result, it seems logical that certification, which is aligned to the U.N. organizational requirement for promotion and image, does not correlate with the critical success factors for project management. However, more interesting is the perception that training, which relates to tacit as well as explicit knowledge of the project management subject matter, is perceived to be crucial and is supported by strong correlations with critical success factors suggest the need for further research into the role of project manager leadership and his/her effective communication. Further studies into the knowledge and information management, as it relates to projects, may provide a potential avenue for enhancing effective communication. As the results indicate, and in the context of U.N., project management training and not certification might be necessary and sufficient to support success as a core competency to critical factors for project management. The implications of this finding entail cultural change, project management institutionalization, and succession planning. In other words, if professionals who are trained (certified or not does not make a difference) are rewarded for practicing best project management standards as institutionalized and accepted in the organization, and incentives are given to continue, then that could be a sustainable solution to maintain and sustain organizational best practices in project management. Although project management has a fixed duration of each project, its practice became part of the operation and tied into certain initiatives such as performance management.

3.4.4 Synthesis

This review has assessed the recent development of the project, programme and project portfolio management literature and highlighted the divergent views of strategic fit that exists in the literature. As reviewed, the project management approach and associated concepts originated from top managers planning methods which they rejected after thirty years of unacceptable experiences with project outcomes and success. The project management literature was also found not to be a generalization from the mainstream management disciplines, unaware of developments in the strategic management literature and was not sufficiently focussed on the increasingly dynamic environment being in line with new trends. For that reason, it is unlikely that project, program, and portfolio management would be a success if they are not aligned with organization's strategy. This project management literature review, demonstrated that the success of the implementation of the project management approach in general (for proper alignment with strategy)

included the following primary factors: the ability of the project manager, the effectiveness of project management, the ability of project team members, and the internal/external environmental factors such as the supports from top management.

3.5 Enterprise Architecture

Enterprise architecture (EA) is an effective way to develop a holistic view of the business by integrating the processes of strategic, business, and change planning with other business and technical governance processes, such as project management and performance management. As mentioned earlier, from an alignment perspective, EA allows the integration of project management and operations with performance and strategic management – ultimately to better manage change.

Enterprise architecture is also responsible for a detailed, repeatable, and scalable methodology for documentation and analysis that utilizes an organizing framework, documentation artifacts, a repository, and best practices. Enterprise architecture supports strategic planning and other operational resource allocation processes by providing macro and micro views of how resources are to be leveraged in achieving the goals of the enterprise that helps to maximize the efficiency and effectiveness of these resources. In turn, it contributes to promoting the enterprise's competitive capabilities. IT resources and associated development projects within the enterprise should be reviewed to determine whether they conform to one or more of the business's strategic goals. If a resource and project are not aligned, then its value to the business will remain in question. On the other hand, the primary aim of any strategic planning is the transformation of an organization from its current state to a better one. It is commonly accepted that strategic planning in general, within any organization, is a complex concept. Today more than ever, the introduction of information technologies into the organization has become an essential enabler to business strategy within any strategic planning framework and makes the organization the more challenging to manage its transformation. It is with that in mind that any conversation in relation to the organization can never occur without considering enterprise architecture, and change management.

3.5.1 Enterprise architecture strategy

Modern organizations find themselves confronted with ever-changing economic, regulatory, and technical environments that they are forced to continuously adapt to (Ross et al., 2006). These

environments can be internal or external, and occur simultaneously. For that reason, the continuous transformation of the organization to better competitive advantages and exploitation of opportunities is a complex task, aggravated by the complex and highly acclimatized architecture of the overall organization (Buckl et al., 2010). The attempt to implement a new business process or an information system such as an enterprise resource planning system, in most cases most likely will increase unforeseen consequences and unexpected detrimental impacts on the current stable state of operations. The institutionalization of such business artifacts leading to the transformation of the organization can be differentiated into fundamental or incremental (Saadé and Wan, 2015). Fundamental transformation is the change of a body moving from one current state into another one while incremental transformation implies the optimization process of the operations.

The EA refers to the comprehensive description of all of the key elements and relationships that make up an organization (Kang et al., 2010). In fact, the EA can be viewed as the blueprint which systematizes the various constituencies of the organization ranging from business process, data architecture to information technologies. The EA enables members of the organization to (1) Understand the detailed organizational structure, and (2) How the various organizational components relate to each other.

Within the EA activity is the question of how to develop one for a specific organization. To that, ISO/IEC 42010 (IEEE Std. 1471, 2000) proposes a formalization of architecture framework within the ontology of the standard. In the field of software engineering, the term architecture framework dates back to the 1970s. An enterprise architecture framework is a prefabricated structure can be used to organize enterprise architecture into complementary views (Emery and Hilliard, 2009). Enterprise information systems, contrary to software engineering, reflects the knowledge of the company structure, strategies, plans, people, activities, processes, resources, business rules and others. The complete representation of all organization's information is called the EA. To develop EA for a specific enterprise, an enterprise architecture framework (EAF) is necessary to facilitate communication and provide terminology for the meta-architecture. The industry has proposed various EAFs, government and research community such as Zachman Framework, ARIS, TOGAF, FEAF, C4ISR, DoDAF and much more (Chen and Pooley, 2009). Among them, the most popular are Zachman's framework (1987).

Regardless of what framework is used to implement an EA, the management of that EA is necessary for the transformation to occur within the specific organizational context. A common method to support the transformation of the organization is the Enterprise Architecture Management approach whose primary goal is to sustain the strategic alignment between business and IT (Henderson and Venkatraman, 1993). Effectively executing an EAM leads to the following organizational impacts:

1. Cost reduction by increased standardization,
2. More efficient project management due to increased responsiveness,
3. Facilitate risk management by reducing organizational complexity,
4. Enhanced strategic business outcomes via increased business process efficiencies, and
5. Increased control of organization change management due to a wider view of the organization.

3.5.2 Enterprise architecture and change management

Saadé and Wan (2013) presented their research shown in Figure 11 below claim that it was difficult to argue strategy, driven by some forces external and internal to the organization, can only be realized by EA-related activities. Meanwhile, there is no doubt these activities, in turn, necessitate the implementation of business process projects resulting in the evolution of the organization. The development of the organization in whichever form it takes undergoes change. Subsequently, the successful management of this change is crucial to any organization to survive and succeed in the present highly competitive and continuously evolving business environment (Rune, 2005). The environment at which the need for change is often identified is unpredictable.

Consequently, the realization that change is necessary tends to be primarily a reactive response to a situation of organization crisis triggered hierarchically top-down. Balogun and Hailey (2004), have reported that around 70% of all change programs initiated failed. They suggested that this may mostly be due to the lack of a fundamental framework on how to implement organizational change. The body of knowledge on approaches to change are in cohesive, dispersed and superficial. Academics and practitioners disagree and contradict each other as explained and elaborated in

Rune (2005). The reasons for this range from invalid and weak assumptions to the lack of implementation of change works due to the body of knowledge being a mostly description and at the abstract level.

3.5.3 Enterprise architecture strategy-fit model

A conceptual model of both business and IT strategies are fully integrated with Change Management, and further inter-connected with Performance Management to ensure performance gains from such integration and increase maturity level in line with U.N. organizations' lifecycle in various dimensions, is presented in Figure 10 below. Project portfolio management (PPM) will play a realization role across organizational divisions, and IT/IS divisions for maximizing the outcome value meanwhile, minimizing the overheads in operational level.

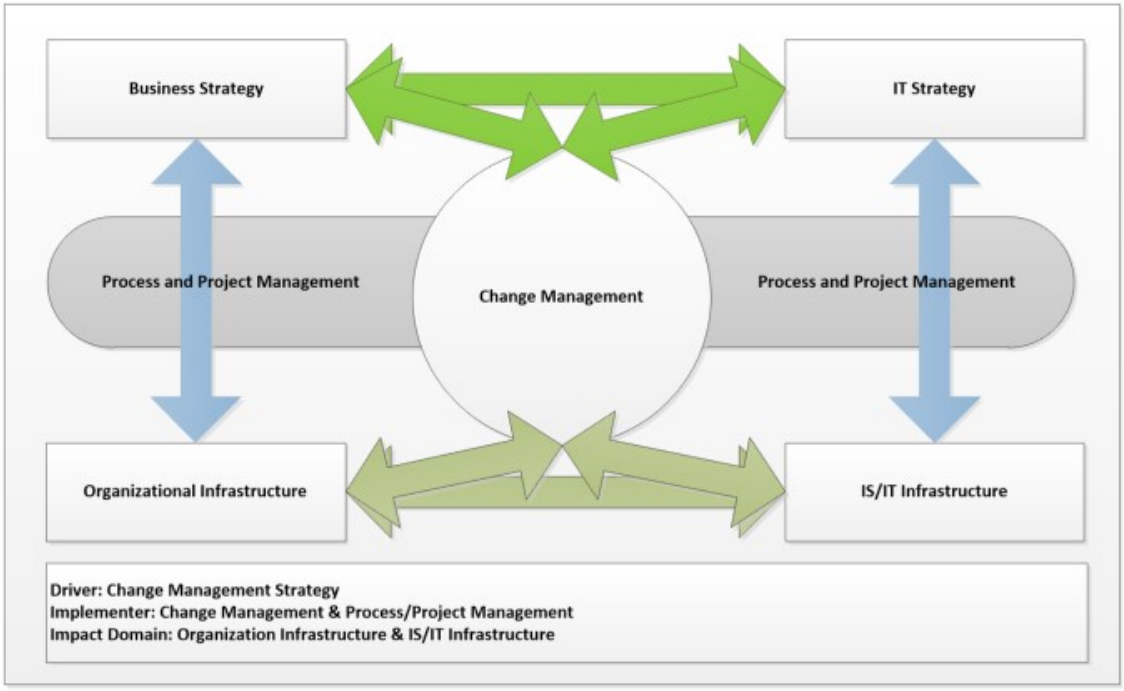


Figure 11: Conceptual Model: Ideal Strategic-Fit Enterprise Architecture model

3.5.4 Enterprise architecture in the U.N. context

The concept of alignment has been expressed in various ways. The Massachusetts Institute of Technology, 1990s framework (Table 4 below) is used as a baseline for comparison in this section. The research model defines the realized architecture of an enterprise in five core areas of

interests. They are 1) the area of goals, objectives, and values, 2) the area of enterprise activities and their management, 3) the area of decisional rights and responsibilities, 4) the area of primary stakeholders and lastly, 5) the area of information systems and the corresponding IT. These resources together define the information infrastructure of the enterprise. The alignments used to explain the concept of interest areas are (1) socio-cultural alignment, 2) functional alignment, 3) structural alignment, 4) infological alignment, and 5) contextual alignment (presented in table 3-13 below).

Alignment	ZACHMAN	TOGAF	GERAM	E2AF
Socio-cultural alignment	Insufficient guidance regarding the relationship between IS and objectives of planner and owner.	Insufficient details offered regarding concept 'enterprise benefits	Alignment based on requirements of IT and rather than objectives of business	Advocates satisfaction of collective needs of the extended enterprise, but offers little practical guidance.
U.N. Context Fit Score	1	2	3	3
	Insufficient guidance regarding business processes and the area of IS and IT.	Alignment ensured by operational contracts between customers of and providers.	Harmonization between required IS services and provided IS services.	Alignment between business processes and IS ensured through basic principles.
Functional alignment		Insufficient guidance on how services are integrated into business processes and subsequently implemented.	Insufficient practical advice regarding the modeling of the various entities of an enterprise.	
U.N. Context Fit Score	1	3	3	4
Structural alignment	Inadequate or missing guidance regarding the areas of authority and	Based on governance contracts, IT responsibility, data	Clear view of responsibilities and	Offers guidance based on the level of influence of

	responsibilities with the parts of IS and IT.	trustees, ownership of common applications	roles of functional areas.	concerned stakeholders.
		Insufficient guidance regarding the relationship between the area of responsibility and the business objectives.	Insufficient guidance regarding harmonization of operations with capabilities of IS and IT.	
U.N. Context Fit Score	1	2	3	4
Infological alignment	Insufficient guidance regarding how information requisites such as quality, availability, comparability, consistency, etc. are treated.	Insufficient guidance on how to avoid information paradox and still promote sharing and availability of data.	Insufficient guidance on how to align stakeholders to IS and IT. Insufficient guidance on aligning human capabilities, mental models, etc and IS capabilities.	Collective understanding advocated through communication between internal and external stakeholders.
U.N. Context Fit Score	1	1	1	4
Contextual alignment	Insufficient guidance regarding how IS relates to the enterprise and its surrounding environment. Unclear guidance as to how the parts of the architecture fit together. Unsatisfactory guidance regarding how the architecture differentiates between real possibilities and system rules.	The framework does not cover issues of alignment between business and IT strategy. Insufficient guidance regarding how the alignment between EA and Enterprise mission is established. Scarce guidance regarding how the alignment between EA and its	Securing structural alignment between areas of the enterprise by crossing functional barriers. Integration and interoperability between the heterogeneous environments of the enterprise.	Legal, ethical and discretionary viewpoints. Strong emphasis on external partners.

		implementation is managed.		
		Alignment between EA and governance established through operational and governance contracts. Stipulates enterprise conformance with regulations, laws, and intellectual property.	Insufficient guidance regarding how the role of IS promotes the responsiveness of the business to environmental changes.	Lack of guidance regarding how to manage conflicting expectations and viewpoints of partners.
U.N. Context Fit Score	1	2	3	3

Table 7: Comparison of Enterprise Architecture and U.N. Strategy Fit

(The number only represent the relative ranking among four EA models; 5 is the best, and 1 stands for irrelevant).

Integrated into table 4 is a U.N. context fit score for each area and architectures. In the framework of the U.N., the EA models comparison into the socio-cultural dimension indicates that none of the architectural approaches covered in this study provide clear guidance with regards to socio-cultural alignment. The functional issues suggest that three of the four methods – TOGAF, GERAM, and E2AF – offer clear advice on the different aspects of functional alignment. However, the Zachman framework offers little support and may, therefore, be considered unsatisfactory regarding attaining structural alignment. Moving on the structural dimension, this study suggests that the situation is to a large extent, the same. That is to say, three of the four approaches - TOGAF, GERAM, and E2AF – offer strong practical support on attaining structural alignment. Again, the Zachman framework is lacking in guidance for structural issues. The analysis of the infological dimension shows that only one of the investigated approaches, only E2AF offers proper guidance

with regards to infological alignment. The support provided by the three remaining methods – Zachman Framework, TOGAF, and GERAM – is either doubtful or brief with few clear guidelines (Table 7).

Finally, the analysis of the contextual dimension shows that three of the investigated approaches – TOGAF, GERAM, and E2AF – provide comprehensive, albeit somewhat simplistic, support regarding contextual alignment. The Zachman framework does not provide any discernible guidelines. It does bear mentioning that among the architectural approaches evaluated; only E2AF offers what may be considered a somewhat nuanced view of contextual issues. By and large, the environment is simply seen as a source of requirements such as legal restrictions and contractual obligations that are perhaps no great surprise, given its sheer complexity as a whole. However, considering that the '*outside world*' is the source for many of the challenges faced by modern enterprises, one would assume that some manner of guidance would be in order. As the results show, there is no '*perfect*' fit to meeting the U.N. context. However, it may be reasonable to assess that both GERAM and E2AF are close enough, as a starting point, to meeting the research goal of this study.

3.5.5 Synthesis

This section attempts to provide a complete view of the literature about enterprise architecture and its importance to strategy and change management within organizations. An integrated perspective of enterprise architecture was discussed and evaluated against different alignment approaches to five enterprise architecture models, with the aim of discovering a best strategy-fit model for U.N. organizations. This section concludes, from a theoretical perspective, that there is no existing strategy theory and management suitable for United Nations bodies, either due the immaturity of the theory or simply due to its unreasonable application to the reality of the U.N., as discussed earlier with regards to Porter's five forces. These views have the potential to serve future U.N. strategic planning framework. However due to its immaturity, practically and theoretically speaking, whether these views would fit the U.N. context today is debatable. In contrast, when this section carries out a comparison analysis among four popular enterprise architecture models, the results clearly indicate that the E2AF is a better fit to the U.N. context than

the others. Of particular interest to this conclusion is that the E2AF includes dimensions integrating its model to the process and project management framework.

According to our research in enterprise architecture, as it relates to strategy and change management, we find that the associated body of knowledge is relatively weak. Therefore, further studies in that subject matter are highly recommended from this finding. Moreover, we concluded that further complications arise when considering strategic alignment, a dynamic process and difficult to achieve due to continuous change processes in business and technology. Therefore, for U.N. organizations to achieve and sustain business-IT strategic alignment, they have to have effective management capacity building programme and practices (e.g. resource-based view and knowledge-based view).

3.6 Contribution of Literature Review

In this chapter, various definitions, relevant processes, as well as practical models in strategic planning, performance measurement and management, enterprise architecture, and project management, were reviewed. It was shown that each of these disciplines faces similar challenges in their contributions to their respective body of knowledge resulting in divergent and non-homogeneous discussions and findings. Nonetheless, this study makes an effort towards identifying relevant common parameters and trends in management to help construct a continuum on which this theoretical treatment can lead to an innovative and integrated conceptual model that is adapted and applied to the U.N. context.

1. Strategic fit: Most of the studies reviewed bringing out only one perspective of strategic fit, yet researchers state that studies should either justify their choices of a particular perspective or apply a multiple-method approach because results are sensitive to the selection and a convenient choice may lead to wrong conclusions (Venkatraman, 1989). Essentially, the principle of strategic fit considers the extent of fit that exists between environment situation, strategy, organization culture and leadership style. In that sense, alignment refers to the appropriateness of the various elements to one another. Accordingly, it makes good sense to explore this principle of strategic fit more closely. This study will, therefore, adopt the general model implicit in configuration school of thought which

assumes that, for organizations to be effective, there must be an appropriate alignment among management structure (Fincham and Rhodes, 2005) and strategy (Lee and Miller, 1996). Little attention has been given to strategic fit because it is practically very difficult to define, if possible at all. Secondly, past studies are mainly on performance measurement and management. This study will assess the effect of its integration of organizational strategy not only with results-based management but also with project management, commonly used for strategic implementation in the U.N. context, which was not done before.

2. Generalization and Multidisciplinary: The body of knowledge indicates that project management is not considered part of the mainstream management discipline, and is relatively unaware of developments in the strategic management literature. Moreover, the project management approach does not seem to be sufficiently focused on the increasingly dynamic business environment continuously evolving with new trends. For that reason, it seems unlikely that project, program, and portfolio management would be a success if they could not align with both organization's strategy and performance measurement and management. In this study, I will assess the extent of integration between strategic management and project management, and the effects that exist in that regard in the U.N. organizations today.
3. Review theories relevant to U.N. context: This review assesses important schools of thought pertaining to the U.N. context and maps strategic processes in various theories with U.N. practices. Also, in this section, I elaborated on performance measurement and management, and used the results-based management approach currently adopted in the U.N., to establish a rational U.N. results management framework. Last but not the least, this study also explored the U.N. theory of change and the dilemmas of its implementation in a typical U.N. environment.
4. Multidimensionality: Due to strong globalization effects, external and internal departments and staff of U.N. organizations are becoming more complex in their interaction with each other. The roles they are playing are getting more plural and must, therefore, have multi-directional communications to ensure that all actors are connected efficiently. Through pluralistic feedback, it is more likely to give the participants a clearer understanding that continued communication can eliminate the understanding difference and increase their

performance. In the end, performance management is the co-existence of equity and efficiency.

5. Pluralism: Given the complex internal and external environments of U.N. organizations, appointed executives, members of Council, middle-level managers of organizations, and member-states have different expectations and demands from a performance management framework. Engaging in pluralistic actor opinions causes conflicts due to the various interests of participants during the promotion of performance management. Therefore, managers must learn to apply coevolution management methods and discover the adaptive process from the pluralistic elements' inter-evolution.
6. Dynamic adjustment: Due to the continuously increasing higher degrees of uncertainty of the business environment (more specifically in the U.N. organizations), measurement standards of performance management increasingly continue not to meet stakeholder requirements. Managers of U.N. organizations within the dynamic process between stable and unstable situations will have to master the application of paradoxical management methods to adjust related performance demonstration methods and respond rapidly to the increasing rate of change in the internal and external environments – if they are to improve organizational performance.
7. U.N. differences from other sectors: The uniqueness of the U.N. organizations is recognized in this study, clearly differentiating them from those in the private and public sectors. These findings differentiating the U.N. as a whole will contribute to future studies of U.N. type of political organizations and their management theories and best practice.
8. Factor dimensions relevant to the U.N. context: This study also identified relevant factors/dimensions extracted from existing research in the private and public sectors. That in its own regards would help this study explore, consolidate and aggregate the effects of current U.N. management environment and future fit models.

In the next chapter, we utilize the findings from the literature review chapter and its contextualization to the nature of the U.N. organizations to propose an integrated conceptual model that aligns change and change management, strategy, performance management, and project management. The aim ultimately is to test this UNIMM for the U.N. context and construct an

adequate model that can be implemented efficiently and more via a proposed just in time framework.

CHAPTER 4 CONCEPTUAL MODEL

Recall, the United Nations General Assembly (U.N., 2000) which resolved '*to ensure that the organization is provided on a timely and predictable basis with the resources it needs to carry out its mandates*' and urged '*the Secretariats to make the best use of those resources.*' Since then, the issue of management reform took center stage, and efforts were reported to the Assembly regularly as part of updating on the progress of various agenda items. Thereafter, '*Change*' and '*Management Reform*' became a favored slogan in the U.N., often being used as a political term asking the Secretariat for enhancing efficiency and effectiveness while at the same time, using it as means to freezing programme budget. This created an environment of endless debates and discussions between the Secretariat and member-states. While member-states felt that their position was the '*ultimate decision makers*' in the organization and that this was being compromised by some of the proposed Changes for reform. The Secretariat constantly protested to member-states of '*micro-management*' who were asking endless paperwork and reports including unrelated activities and claimed that it was deprived of the tools to carry out its management responsibilities efficiently.

Both arguments are valid to a certain extent, and the mutual feelings of unease evolved into a general sentiment of distrust. Introducing a management change of any kind often resulted in a deepening wedge between the Council and the Secretariat. Changes caused uncertainty for both stakeholders and Secretariat about future rights, responsibilities, privileges, and roles. To mitigate these effects of reform on the relationship between council and secretariat, it is of the utmost importance that reform efforts be transparent and participatory, as much as possible. For that reason, I would like to stress that any attempt towards reform management at the U.N., should be accompanied with open communications as one cannot ignore the magnitude of that challenge. Anything short of fully acknowledging such a challenge would obstruct the ability to reach sustainable solutions and render efforts wasted.

U.N. members have been discussing Change efforts for decades, but an agreement among member-states or even within the Secretariat has proven impossible because of competing interests. Therefore, during the '*Waves of Change*,' an increasing number of pressures were put on U.N. organizations. It is against the backdrop of these pressures that the conceptual model is formulated,

results are analyzed, and interpretations made. These pressures were summarized based on numerous U.N. General Assembly Resolutions and U.N. JIU reports as follows (U.N. General Assembly, 2004, 2009, and 2016; Democracia Abierta, 2016; UNJIU, 2011):

1. *Outdated Structure*: It is worth to reviewing the pressure before we introduce the conceptual model. In U.N. management structure, most of the appointments are based on both internal and external political influence with deep consideration of state's budget contribution, representative or even unspoken political arrangement rather than truly depending on the competency of the candidates.
2. *Dramatically Increasing demands:* The expansion of mandates and responsibilities necessitated an increase in staff at all levels. In many ways, the U.N. needed to evolve with rapid deployment capabilities and a multidisciplinary expert staff capable of handling the wide range of issues on its agenda.
3. *Bulky organization:* The U.N. today is drastically different from what it was when established in 1945, expanding tremendously due to member-states' mandates to deal with a multitude of issues ranging from preservation of international peace and security to promoting sustainable economic development to poverty and disease eradication as well as peacebuilding and the promotion of human rights.
4. *Unreliable funding source:* Member-states entrusted the United Nations to implement new mandates yet, allowed only '*zero-nominal*' growth in its regular budget. The expansion of the agenda of some of the U.N.'s principal organs could have never been financed from the '*existing resources*' of the organization. U.N. organization grew to rely on extra-budgetary resources as a mechanism to help them keep up with new demands despite the fact that such remedies were meant to compliment regular budgetary allocations rather than replace them.
5. *Political horse trading:* There is widespread behind-the-scenes jockeying for top jobs in the U.N. Secretariat and U.N. agencies, not to mention seats on the main bodies like the Human Rights Council and the Security Council. Every country belongs to a regional group that lobbies to ensure it is well represented. There is often criticism that those who get the seats are not the best qualified, such as dictatorships elected to the rights council. Also interesting enough, many states' representatives often later become staff members in the Secretariat, who will continue the business as usual practices as they once asked the Secretariat to improve.

6. *A sense of urgency, but difficult to act on:* While U.N. navigated through the rough waters of member-states' calls for accountability and transparency for efficiency and effectiveness, the U.N. had to launch an effort restoring its reputation and relevant position in the global society.
7. *The difference in a vision to achieve reform:* This gap reflected not the only difference in the assessment of the state of affairs in the organization but also a difference in visions and modalities to achieve the proposed reforms.
8. *Difficult to accumulate knowledge* for change to succeed in any U.N. organization, this change must be gradual, methodically applied, inclusive and collaborative. Unfortunately, the process that led to the adoption of the Outcome document (U.N., 2012) was motivated by political pressures; set in artificial deadlines; and lack of inclusiveness.
9. *Resistance and uncertainty:* Resistance to Change and the unjustifiable constant refusal to engage in the process of management reform invite retaliatory behavior, further complicating and politicizing the discussions. Genuine Change cannot be imposed, and real reform can only be brought about if there is broad agreement on the vision of Change and the modalities to achieve it.
10. *Lack of transparency:* In essence, the current management state of affairs in the United Nations is a natural outcome of an interaction process between the Secretariat and the member-states that can at best be characterized by relative unease, lack of cooperation and deep distrust. The Secretariat failed to provide the member-states with the full and necessary information for proper decision making. Lack of clarity of the Secretariat's proposals and weak justifications reinforced the General Assembly's fear of losing control and glorified its suspicion of '*hidden agendas.*' In the eyes of many member-states, the Secretariat disregarded their directives and was selective in implementing their mandates. Having said that, member-states also contributed to the deteriorating situation since their discussions shifted from substance to political posturing and score settling.

In addition, the intergovernmental nature of the organization must always be taken into account. Ignoring this fact will only perpetrate more complications and further threaten desired potential achievements. Politics and special interests will always be variables in the reform equation, but it is up to the stakeholders to decide what a priority is for them.

The ten most important pressures (elaborated above) that U.N. organizations are still facing today represent their complex challenges that they need to resolve in the upcoming decade(s). These challenges embody a spectrum of projects and activities driving change whose time and increment need to be managed adequately. Activities associated with this change must connect projects with strategy through performance. Only when a U.N. organization's project portfolio is aligned (harmonized and synchronized) with its strategic plan, can change be controlled (increment in time and amount). The notion of managing the desired amount of change to occur over a specified time duration is introduced with the concept of '*Just-in-Time*.' The construct of JIT will be discussed in a later chapter, which will explain the use of it for the mobilization of the conceptual model outcome proposed herein.

Based on previous discussions, a conceptual model is postulated with the integrated elements of Managing Change, Strategic Planning, Strategic Development, Results (performance) Management and Programme (project) implementation (see Figure 12). Changes are triggered by both external and internal drivers that are inevitable for the U.N. organizations. To ensure that U.N. organizations can bring in Change effectively it is vital that the U.N. has to thoroughly manage Change, build capacity through continuous learning and adjustment, and implement the programme smoothly as planned. The conceptual model presented in Figure 12 is divided into two primary zones (top and bottom):

1. Political interest trading zone (Top): The top part of the Figure represents the management reform process (entailing the member-states and council), and overlaps with the strategic management (direction) activities which control the operations of the secretariat. Members in this zone operate in an environment of global conflicts greatly influenced by political power, government agendas, and interest exchange. This zone is a ground all member-states exercising their political strength as well as exchanging for the best interest in the U.N. platform. Due to its power nature, it is challenging to make any significant change in terms of way of strategic thinking, systematic planning, and method of delivering process. Therefore, this zone is not under the spotlight of this study.
2. Programme focus zone (Bottom): This zone (bottom part of the Figure) focuses on exercising the organization's mandate by managing strategy, especially in the strategic development, performance, projects, and operations. This is done at all levels of programme,

project and service implementations in the region or country level. Members in this zone focus on the technical aspect of their work and on getting the job done as planned and mandated.

At the interface between the two zones, management disorder increases as friction between the two layers increases due to tensions caused by the exchange of attempted influence-of-interests across the zones: member-states exercising, via their officials, their country's interests on the Secretariat's operations while the Secretariat executing its reform plans while exerting pressures on member state's role.

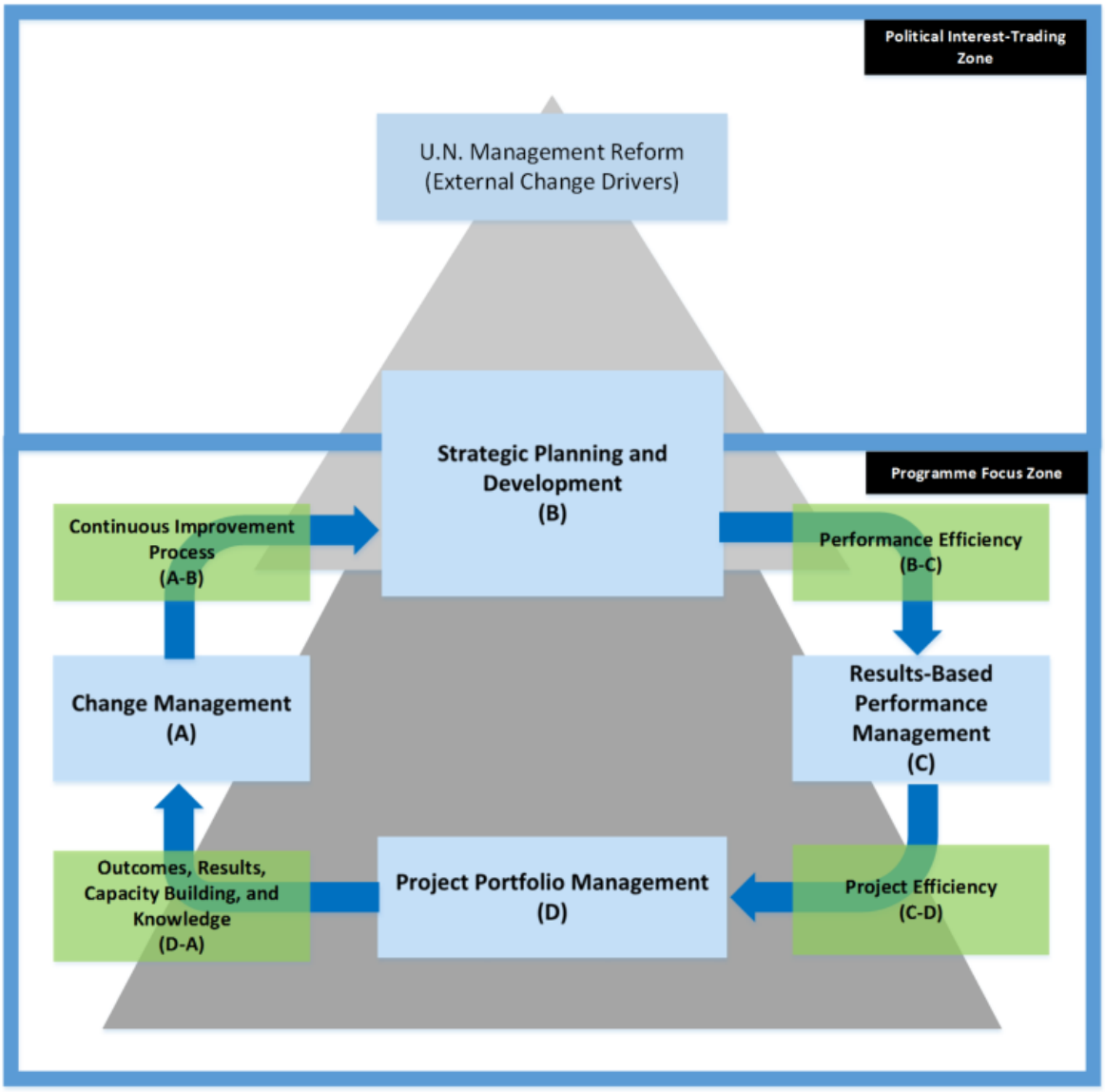


Figure 12: The Conceptual Model of Integrated Management for the U.N. Context

Representing the programme focus zone, the bottom part in Figure 12, is a schema of the conceptual model which consists of the six integrated management components discussed and elaborated in the previous chapter. Each component is described as follows:

1. *Change management (A):* These are the root causes of Change. The internal drivers are considered a manifestation of external drivers for Change. U.N. organizations are driven to Change due to external, strategic drivers. In general, the factors that influence Change are two types i.e. internal and external. Internal factors comprise of new organizational goals, new leadership, values, norms, new programme processes, whereas external factors include government actions, political, socio-cultural, competition, new technologies, and etc.
2. *Strategic Management (B):* Planning for strategy require identifying and defining vision, goal, leaders planning, and direction, continuous support from top management, communication, staff engagement, negotiating and training. The strategic planning process must be in line with Change vision and goals. With proper communication and negotiation, staff members can be engaged to participate the process and claim the ownership of the process. For staff adopting the changing environment, training for new skill set has to be provided to them.
3. *Results-based performance management (C):* The Results-based management system requires top management within the Secretariat to be actively involved in performance planning and development and consensus building with the lower accountability levels. That is in line with the top-down and bottom-up approaches reviewed in the literature review section. This strategic performance planning process essentially focuses on programme implementation and results at the various stages of implementation such as resource utilization (inputs), activity completion, output generation, and outcome/impact achievement.
4. *Strategic implementation (Project Portfolio Management) (D):* In some U.N. organizations, selection and administration of projects often fail to support the strategic plan of the organization. Strategic plans are written by one group of managers, project selected by another team, and implemented by another. These independent decisions lead to conflict, confusion, unsatisfied customers, and organization resources are wasted in non-value added projects. In integrated project management system, all the parts are interrelated. A Change in any part will influence the whole. In any U.N. organization, there are member-states to

satisfy. Mission, objectives, and strategies are set to meet their needs. Development of a mission, objectives, and strategies depend on analysis of the internal and external environment. The outcome of the environmental analysis is a set of strategies designed to meet the needs. Implementing strategies is the most difficult step. Strategies are typically implemented through projects. The key is to select those projects that make the largest and most contribution to the objectives and strategies of the organization.

5. *Continuous Improvement Process (A-B)*: When evolving an environment (or culture) of continuous process improvement using associated methodologies, such as Just-in-Time, the ultimate goal is to improve business performance. An important factor is changing the underlying institutional environment of an organization, such as culture. It is important to define what environment in terms of the organization and to understand its ramifications to the organization. Therefore, effective organizational change is the result of changed norms and beliefs of individuals (staff members) reinforced by actions supporting the desired change. Accordingly, staff's beliefs and bureaucratic barriers often play key roles in institutional pressures to an organization. Linking continuous process improvement to business performance and strategic management is one of the greatest challenges faced by the organization. Without this linkage, continuous improvement is scatter-shot at best and random at worst. Making a connection between continuous process improvement and business results can be problematic, nevertheless, mediating through Just-in-Time, the process can be streamlined due to the success experience in a manufacturing system. On the other hand, by lowering the barriers in bureaucracy will help to improve and encourage strategic development.
6. *Performance Efficiency (B-C)*: This characteristic represents the performance relative to a number of resources used under stated conditions. Better outcomes from strategic development will strengthen the effectiveness of performance efficiency. According to the international organization for standardization (ISO) 25010, the performance efficiency in management represents response behavior, resource utilization, and sustainable capacity.
7. *Project Efficiency (C-D)*: Project efficiency represents project meeting cost, time and scope goals. However, it is often debatable that '*there are many cases where projects are executed as planned, on time, on budget and achieve the intended performance goals, but turn out to be complete failures because they failed to produce actual benefits to the customer or*

adequate revenue and profit for the performing organization.' Therefore, project efficiency is important to project success, because if the project is completed late and over budget, it will be harder for it to be a business success. Prabhakar (2008) notes: '*There is also a general agreement that although schedule and budget performance alone are considered inadequate as measures of project success, they are still essential components of the overall construct. Quality is intertwined with issues of technical performance, specifications, and achievement of functional objectives and it is achievement against these criteria that will be most subject to variation in perception by multiple project stakeholders.*' In this study, we consider both are critical dimensions to the project success.

8. *Outcomes, results, capacity building and knowledge (D-A):* The effect of results management (performance management) in the organization can be witnessed in both productive and behavioral aspects. If the implementation of the programme (project management) is successful, then productive outcomes like in time project completion and project quality improvement, and behavioral outcomes like an increase in staff members' engagement and participation in changing will facilitate the organizations to run efficiently and get a competitive advantage.

Figure 13 provides the theoretical details to the conceptual model presented in Figure 12. This figure illustrates the theoretical construct within their respective conceptual areas. Figure 13 not only shows the components and their inter-relationships but also represents a continuous improvement cycle managed by the notion of Just-in-Time. This representation is equivalent to enterprise resources planning end-to-end cycle and can be more accurately identified as an Organizational Change and Impact Planning (OCIP) cycle. With the cycle, we have the change management activities (left) that interact with all external and internal stakeholders for information exchange, support and collection of feedback and similar sense making. This knowledge gained with the stakeholders gets transformed to the next desired improvement iteration leading to the necessity for a revised strategic plan (top). This new revised strategic plan drives the process of performance measurement from the previous strategy and facilitates the modification of the instituted performance management framework while at the same time addressing the continuous increase in efficiencies. With the updated performance management framework, the details of its implementation are negotiated and established with the internal stakeholders thereby compiling a set of results-based measurable indicators (right). These indicators are programme focused and

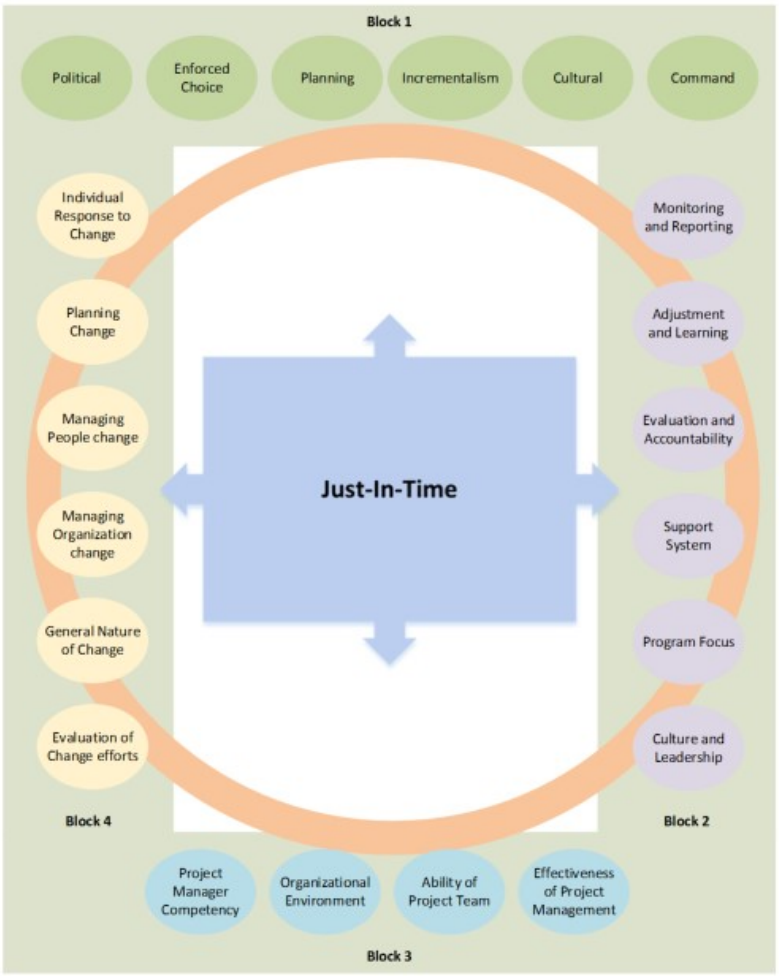
require an activity of leveling so that all initiatives are balanced towards the strategic objectives thereby mitigating possible adverse impact to organizational change caused by relatively weaker parts of the organization. These programme-focused indicators lead to the creation of projects to be managed under a number of portfolios (bottom) whose primary outcomes is to build capacity and organizational intelligence. This point of the OCIP cycle is of the utmost importance as it is the single condition to make change management possible. At this point, new knowledge gets transferred and communicated to all internal and external stakeholders, which makes change management possible (left).

At the center of all this, Just-in-Time represents an accounting system whereby all activities (transactions) are logged and monitored allowing for an intervention to occur via a dynamic framework to respond to environmental changes. The JIT framework is operationalized (to be described in the methodology and JIT chapters) to adjust the left, top, right and bottom components shown in Figure 12 strategic plan, performance measurement and management approach, project portfolio, and change initiatives, respectively. This scheme proposes a dynamic integrated system to manage fast-paced change in general, and reform in specific for the U.N. and its organizations.

Performing a comprehensive review of available literature, we note that there does not seem to be an integrated view of change management in organizations, but rather the research body is clustered around the areas of strategy, performance, project management and change management. To that effect, the literature does identify constructs related to the four research areas. A theoretical and conceptual model consisting of these constructs, and the corresponding relationships are even with the respective areas are relatively few, and none were found where UNIMM was proposed and studied. Presented in Figure 13, is the alignments across the four areas, giving the constructs found in the literature and those that we will be studying herein.

Understanding the linkages at the construct level within each area is not possible from the literature and not available across the areas. This is due to two primary reasons. Namely, that empirical work in this type of management studies are scarce when dealing with a field of management and non-existent when looking for empirical studies across the management areas – This is particularly the case in the U.N. organization's context.

Existing literature on strategic management attempts to demonstrate theoretically and empirically a variety of the strategy development process, and it is widely accepted the concept that strategy development is multidimensional in nature (Fredrickson, 1983; Derkinderen and Crum, 1988; Eisenhardt and Zbaracki, 1992; Bailey and Johnson, 1996). Hart (1992) categorized previous research of strategy making process typologies, and then proposed a new framework, explained the multidimensional nature of the strategy development process with five different dimensions; i.e. Command, Symbolic, Rational, Transactional and Generative.



Block 1: Strategic Planning & Development constructs (Bailey, A., Johnson, G., & Daniels, K., 2000)
Block 2: Results-based Management constructs (United Nations Development Group, 2007)
Block 3: Project Management constructs (Saade R. & Wan J., 2015)
Block 4: Change Management constructs (Burke, 1994)

The Research Model

Results-based Management Factors

Change Management Factors

Project Management Factors

Strategic Planning & Development Factors

Figure 13: Relationships of the UNIMM

It is commonly agreed that strategic management comprises three main components, i.e. strategic planning, strategic development and strategic implementation, respectively. Based on Bailey's (2000) six dimensions multidimensional model, a model was built on the foundation of the strategic process beginning with strategic planning and strategic development components. The principles of this model aid in the understanding of the essential effects of strategic planning and strategic development based on Mintzberg et al.'s (1998) schools of thought, i.e. planning,

incremental, command, enforced choice, political and cultural dimensions. Considering previously published theories and empirical evidence, Fredrickson (1983), Derkinderen and Crum (1988), Hart (1992), Eisenhardt and Zbaracki (1992), Bailey and Johnson (1996) propose an integrated framework for understanding and interpreting the process.

Based on Bailey et al. (2000) research, there is a lot of discussions alluding to the interconnectivity of constructs across the management areas. Furthermore, in practice, change management, strategic planning, performance management and project management in U.N. organizations, are often carried out through an independent process by separate offices. From that perspective, the effectiveness of such silo management practices often introduces different strategic directions and competing for management practices to achieve the goals. *Putting it altogether, this silo-based culture of management in U.N. organizations driven by the silo-based body of management research, make the study of an integrated approach the more necessary.*

This analysis and insight rationalized within this chapter takes us back to the conceptual model presented herein and allows us to posit the following research questions (RQ):

RQ1: What are the factors that influence change management in the U.N. organizations?

RQ2: What are the factors that affect strategic management in the U.N. organizations?

RQ3: What are the factors that influence performance management in the U.N. organizations?

RQ4: What are the critical success factors for projects and project management in U.N. organizations?

RQ5: What is the connection between strategic management and performance management in U.N. organizations?

RQ6: What is the relationship between performance management and project management in U.N. organizations?

RQ7: What is(are) the integration effect(s) of strategic management, performance management, and project management in U.N. organizations?

RQ8: What is(are) the mediation effect(s) of strategic management, performance management, and project management in U.N. organizations?

CHAPTER 5 RESEARCH METHODOLOGY

In this chapter, the methodological approach of the research is presented including the description of the research context, sampling procedures, participants, measures, and analytical techniques.

5.1 Survey Procedure & Participants

Advantages of online surveys compared to postal questionnaire survey are low cost, fast response rate, more geographical coverage and fewer unanswered questions (Bryman, 2008). Two separate surveys were carried out through the online survey tool '*Qualtrics,*' which enabled this study to confidentially and quickly distribute it to potential participants in the U.N. organizations, and manage the surveys in a cost-effective and time-efficient manner. Participants were emailed a link to the survey with relevant information. Although disadvantages of online surveys were reported (Bryman, 2008), as having low response rate due to challenges associated with internet access, this does not apply here since all U.N. employees have full access to the Internet and email systems as it is part of their daily operational tools carrying out their work and missions. Per U.N. rule, there was no incentive means offered to the participants. Therefore, any participant is on a voluntary basis and can stop their answers anytime they wish for any reason.

U.N. organizations are the only organizations targeted for the data collection in this study. Two of the four management models were tested for the U.N. context. An initial project management instrument applied to the private sector was pre-tested in a U.N. specialized agency from 2013 to 2015 (Saadé and Wan, 2015). The results-based management instrument used in this study was reviewed by U.N. Jointed Investigation Unit and endorsed by U.N. governing bodies for U.N.-wide management guide book since 2006 and was officially pre-tested in UNDG, the second largest U.N. organization. The instruments for change management and strategic management were adopted from validated empirical studied applied to the private sector.

This study was carried out through two separate surveys. The first survey 'Survey 1' focused on change management's effects on U.N. organizations. Participants included U.N. staff members in the management fields across seven U.N. agencies. The second survey 'Survey 2', Participants included U.N. officials in the management fields across three U.N. agencies, was about

strategy, results-based management, and project management. Survey 1 was administrated by Qualtrics. After enough data had collected from Survey 1, the data collection moved on to Survey 2, was conducted by sending the survey link to three U.N. agencies.

Regarding the survey structure, each survey starts with a statement sharing some background information and ethics review board requirements (Concordia protocol code: 30006112). The second part of the survey includes demographic questions such as U.N. organization name, grade, position, and years of experience in the organization of the respondent. The third part of the survey incorporates the questions related to the theories elaborated in Table 8.

Construct	Theory Source
Change Management	W. Warner Burke (2001) Managing change: A strategic approach to organizational dynamics. London: Prentice Hall.
Strategic Management	Luiz Ojima Sakuda and FGV-EAESP (2003) Bailey, A., Johnson, G., and Daniels, K. (2000) Bailey, A. and Johnson, G. (1995)
U.N. Results-based Management	United Nations Development Programme (2007). Evaluation of Results-based Management at UNDP.
Project Management	Saadé and Wan (2015) Hyväri, I. (2006) Starkweather, J., and Stevenson, D. (2011), Pinto, J. K., and Slevin, D. P. (1987)

Table 8: Surveys' Theory Sources

Initially, an email was sent to chief information officers (CIOs) or head of information technology departments from ten U.N. organizations encouraging them to participate in the study and seeking approval for the participation of their employees. Seven out of ten U.N. organizations responded that they would like to participate and that they were also interested in helping in sharing the survey results within their organizations. Three softly rejected due to their internal legal concerns. These ten organizations were selected because they were undergoing significant change and would present an environment that is more of a challenge and relatively higher in complexity, to measure and learn from. By selecting those agencies, we would hope to capture deeper knowledge about change management as compared to organizations that are not undergoing significant change.

The link to Survey 1 was then sent to the CIOs so they can distribute it to their employees. Three reminders were sent to follow up on the participants: after one week, after two weeks and after four weeks. This survey was sent to the Director and Professional grades of full-time U.N. staff members or another equivalent level, such as management secondees and consultants. Qualifications for U.N. staff on the Director-level requires a master degree from an accredited university and in the management role with at least 15 years' proven working records in U.N. system. The Professional grade or equivalent U.N. employee requires a bachelor degree from an accredited university and has at least seven years working experience, among them, required at least three years' management experience in the U.N. organizations. Due to U.N. equality of gender and geography representation (EGR) policy, this study cannot force the participant to provide gender, age or nationality information.

When enough data were collected from Survey 1, a similar approach was followed for the administration of Survey 2. In this case, three agencies were selected. The selection of these organizations was based on their strategic direction and high activity level associated with the implementation of a performance management framework and project management approach. All three U.N. organizations responded that they would like to participate and that they were also interested in helping in sharing the survey results within their organizations.

5.2 Survey Instruments

The first survey included items to understand the effect of change management (Table 9), while the second survey entailed items to address the integrated effect of three management models, i.e. the strategic management, the results-based management, and the project management models (Tables 10, 11, and 12).

Likert-type scale

For Survey 1, a 5-point Likert-type scale was used to increase response rate and response quality along with reducing respondents' '*frustration level*' (Babakus and Mangold 1992). Previous research has also found that a five-point scale is readily comprehensible to respondents and enables them to express their views (Marton-Williams, 1986). Considering

resistance, apathy, and uncertainty nature of change and change management in U.N. organizations, to encourage response rate.

According to Symonds (1924), he suggests that reliability is optimized with seven response categories, and Ghiselli's (1955) initial investigations tended to agree. Lewis (1993) found that 7-point scales resulted in stronger correlations with t-test results. Also, Miller (1956) argued that the human mind has a span of absolute judgment that can distinguish about seven distinct categories, a span of immediate memory for about seven items, and a span of attention that can encompass about six objects at a time, which suggested that any increase in number of response categories beyond six or seven might be futile. Therefore, this study adopted 7-point Likert scale in Survey 2.

5.2.1 Change management constructs

The measures of change management were adopted from W. Warner Burke (1990) Managing Change Questionnaire. All items presented in Table 9 were scored on a 5-point Likert-scales, ranging from '*Total True*' (1) to '*Total False*' (5). The scales utilized in this survey were 5-point Likert-type scale. The original questionnaire was designed based on Boolean type scale, namely True and False. However, for assessing the extent of the effects, the questionnaire was modified accordingly.

Change Management		
Construct	Indicator	Item Code
Individual Response to Change	People invariably resist change	CM1
Planning Change	The articulation of the organization's future state by its leaders is one of the most important aspects of a successful change effort	CM2
Managing the 'People' side of Change	The most difficult aspect of any change effort is the determination of the vision for the future state	CM3
Managing the 'People' side of Change	In any change effort, communicating what will remain the same is as important as communicating what will be different	CM4

Individual Response to Change	Lacking freedom of choice about change usually provokes more resistance than change itself	CM5
Planning Change	A highly efficient, early step in managing change is to surface dissatisfaction with the current state	CM6
Managing the 'People' side of Change	A common error in managing change is providing more information about the process than is necessary	CM7
Managing the 'People' side of Change	As movement toward a new future begins, members of an organization need both time and opportunity to disengage from and grieve for the loss of the present state	CM8
Planning Change	The planning of change should be done by a small, knowledgeable group that communicates its plans on completion of this task	CM9
General Nature of Change	Despite differences in organizational specifics, certain clear patterns typify all change efforts	CM10
Managing the 'People' side of Change	In any change effort, influencing people one-on-one is more effective than in small groups	CM11
Individual Response to Change	Managing resistance to change is more difficult than managing apathy about change	CM12
Evaluating the Change effort	Complaints about the change effort are often a sign of progress	CM13
Planning Change	'*Protect one's territory*,' both individual and group, are usually the greatest obstacle to systemic change	CM14
Planning Change	The first question asked by most people about organizational change concerns the general nature of the future state	CM15
Managing the 'Organizational' side of Change	Symbols, slogans, or acronyms that represent organizational change typically reduce the effectiveness of the effort rather than add to it	CM16
Planning Change	Leaders find it more difficult to change organizational goals than to change the ways to reach those goals	CM17
Evaluating the Change effort	Successful change efforts typically require changing the reward systems to support the change	CM18
Evaluating the Change effort	With little information about the progress of a change effort- people will typically think positively	CM19
Managing the 'Organizational' side of Change	A change effort routinely should begin with modifications of the organization's structure	CM20

Managing the 'Organizational' side of Change	The more members of an organization are involved in planning the change, the more they will be committed to the change effort	CM21
Evaluating the Change effort	Our strategies often have to be changed because certain groups block their implementation	CM22
Planning Change	Organizational change is typically a response to external environmental pressures rather than internal management initiatives	CM23
Managing the 'Organizational' side of Change	In managing change, the reduction of restraints or barriers to the achievement of the end state is more effective than increased pressure toward that end state	CM24
General Nature of Change	Effective organizational change requires certain significant and dramatic steps or leaps' rather than moderate incremental ones	CM25

Table 9: Change Management Constructs

5.2.2 Strategic management constructs

The measures of the Strategic Management research model were adopted from A. Bailey, D. Johnson and K. Daniels (2000). These processes produced a final selection of 24 items. These are shown in Table 10. Items were rated on a seven-point scale, the same as the original 7-point scale used in Bailey et al. (2000) study. The scale was anchored only at the extremes with *'strongly disagree*' (1) and *'strongly agree*' (7). To ensure a consistent frame of reference in rating the items, respondents were informed that the items were designed to assess *'how strategic management are made in your organization.'*

Strategic Management		
Construct	Indicator	Item Code
Planning	I have definite and precise strategic objectives	SM1
Incrementalism	To keep in line with our business environment, we make continual small-scale changes to strategy	SM2
Cultural	Our organization's history directs our search for solutions to strategic issues	SM3
Political	The information on which our strategy is developed often reflects the interest of certain groups	SM4
Command	The strategy we follow is directed by a vision of the future associated with the chief executive (or another senior Figure)	SM5
Enforced Choice	Our business environment severely restricts our freedom of strategic choice	SM6

Planning	I have precise procedures for achieving strategic objectives	SM7
Incrementalism	I keep early commitment to a strategy tentative	SM8
Cultural	There are beliefs and assumptions about the way to do things which are specific to this organization	SM9
Political	Our strategy is a compromise which accommodates the conflicting interests of powerful groups and individuals	SM10
Command	Our strategy is closely associated with a particular individual	SM11
Enforced Choice	I am not able to influence our business environment; we can only buffer ourselves from it	SM12
Planning	Our strategy is made explicit in the form of precise plans	SM13
Incrementalism	Our strategies emerge gradually as we respond to the need to change	SM14
Cultural	Our culture dictates the strategy we follow	SM15
Political	The decision to adopt a strategy is influenced by the power of the group sponsoring it	SM16
Command	The chief executive determines our strategic direction	SM17
Enforced Choice	Barriers exist in our business environment which significantly restricts the strategies we can follow	SM18
Planning	I make strategic decisions based on a systematic analysis of our business environment	SM19
Incrementalism	Our strategy develops through a process of ongoing adjustment	SM20
Cultural	There is resistance to any strategic change which does not sit well with our culture	SM21
Political	Our strategies often have to be changed because certain groups block their implementation	SM22
Command	Our chief executive tends to impose strategic decisions (rather than consulting the top management team)	SM23
Enforced Choice	Many of the strategic changes which have taken place forced on us by those outside this organization	SM24

Table 10: Strategic Management Constructs

5.2.3 Results-based management constructs

The measures of the results-based management research model were adopted from the UNDP Results-base management survey (2007). The original questionnaire was designed based on Boolean type scale, namely '*Agreeing*' and '*Disagreeing*.' However, for assessing the extent of the effects, the questionnaire was modified accordingly. All items (see table 11) were scored on a

7-point Likert-scales, ranging from '*Strongly Agree*' (1) to '*Strongly Disagree*' (7). To ensure a consistent frame of reference in rating the items, respondents were informed that the items were designed to assess *'how performance management are made in your organization.'*

Results-based Management		
Construct	Empirical Indicator	Item Code
Culture and Leadership	My organization encourages risk taking and mistakes in the pursuit of better performance (means better results).	RBM1
	In my organization, it is more important to achieve better performance in results than to follow the process and deliver outputs.	RBM2
	Adequate trained resources are available for operating the program performance management system.	RBM3
	Adequate staff time allocated for operating the results-based management system.	RBM4
	An adequate budget is made available for operating the results-based management system.	RBM5
Programme Focus	The main value of existing management practice is in allowing us to focus our programme by saying no to political influence in non-strategic areas	RBM6
	My organization's outcomes are developed through a collaborative process with involvements of all stakeholders (government, other U.N. organizations, development partners, civil society)	RBM7
	It is normal that policy and planning decisions are informed by empirical evidence on past performance.	RBM8
	The organization in my office is structured to deliver the outcomes	RBM9
	I can confidently explain to my colleagues and development partners the difference between an output and an outcome	RBM10
	I can explain clearly how outputs contribute to programme outcomes	RBM11
	The focus of management in my responsible areas is the achievement of outcomes rather than implementation of individual projects	RBM12
	My organization has an effective outcome monitoring tool	RBM13

Monitoring and Reporting	My organization has more than one monitoring tool in use at different management levels, such as HQ, regional offices, and country offices.	RBM14
	Monitoring and reporting are well harmonized with other development partners and make use of region/state/field office reporting systems	RBM15
Adjustment and Learning	Stakeholders and managers collectively analyze performance and decide on action	RBM16
	Business managers have the latitude, flexibility, and authority to arrange resources (financial and personnel) as required to achieve the desired outcomes	RBM17
	There is a clear link between allocation of required resources and mandated programme and evidence of results in my office programme	RBM18
	I have little scope in allocating resources across our programme or within outcome areas according to results	RBM19
	Whether positive or negative, performance information is used to foster learning	RBM20
	There are an effective follow-up and actions taken on management response to performance evaluations	RBM21
Evaluation and Accountability	Roles and responsibilities at all levels in my organization are clearly set out and known to staff	RBM22
	My organization is demonstrating a proven ability to raise resources and in delivery	RBM23
	Department head is accountable for achievement of programme outcomes	RBM24
	Department head can only be held accountable for delivery of organization's outputs	RBM25
	In my office, staff are under more pressure to ensure timely delivery than to achievement of the outcomes	RBM26
Support Systems	I can easily find guidelines and support from my supervisors to help design objectives and indicators for projects and programmes	RBM27
	The training I have received has equipped me with the ability to plan and manage for outcomes	RBM28
	In our office, adequate time and structured occasions are made available to learn from results and evaluations.	RBM29

	My organization's rewards systems provide real incentives for strengthening a results culture within the organization	RBM30

Table 11: Results-based Management Constructs

5.2.4 Project management constructs

The measures of the project management research model were adopted from Saadé and Wan (2015). The original questionnaire was designed based on 5-point Likert-type scale. To have consistency with another questionnaire in Survey 2, a 7-point Likert-type scale was used. The scale was anchored only at the extremes with *'strongly disagree*' (1) and *'strongly agree*' (7). To ensure a consistent frame of reference in rating the items, respondents were informed that the items were designed to assess *'how project management are made in your organization'* (Table 12).

Project Management		
Construct	Empirical Indicator	Item Code
Ability of Project Manager	to communicate at multiple levels	PM1
	to deal with ambiguity	PM2
	to coordinate team works and opinions	PM3
	with effective leadership	PM4
	with technical knowledge and hands-on experience	PM5
	with self-commitment to the project success	PM6
	with right competence in project management	PM7
Effectiveness of Project Management	a clear project boundary	PM8
	end-user commitment	PM9
	adequate funds/resources	PM10
	project realistic schedule/time	PM11
	clear goals/objectives	PM12
	project mission being in line with organization's strategic objectives	PM13
Ability of Project Team members	required technical background/technical skills	PM14
	right communication skill with client	PM15
	effective project monitoring and response to feedback	PM16
	commitment to the project success	PM17
	required troubleshooting skills in different stages of the project lifecycle	PM18
	proper personnel	PM19
	effective project executive board	PM20

Organization and Environment	clear staff job description and responsibilities	PM21
	top management support	PM22
	project governing body structure	PM23
	functional/operational manager support	PM24
	client acceptance	PM25

Table 12: Project Management Constructs

5.3 Cleaning of Data

Data screening is the process of ensuring that the data is free from structural and formatting errors and that they are ready for statistical analyses with minimum risk of statistical errors. In this study, data was screened first to ensure that the data is usable, reliable, and valid for testing. In this section, this study will focus on three specific issues as it related to the cleaning of the data. In consideration of the exploratory nature of this study as well as the complexity of the proposed research model, this study will not examine linearity, homoscedasticity, and multicollinearity of the sample data.

If a study is missing much of sample data, then that can cause several bias problems. The most apparent problem is that there simply will not have enough data points to run the analyses. The EFA, CFA, and path models to be used in the analysis, require a certain number of data points to compute estimates. This number increases with the complexity of the research model under study. Additionally, missing data might cause the misinterpretation of contextual issues. Some people may not have answered particular questions in the survey because of some environmental concerns. To address this missing data problem, according to Huisman (2000), there are many different ways to discuss missing values, and imputation is one of the most popular strategies for dealing with missing values in the item scales. In the imputation process, empty data in the data set is filled with estimated values. There are five different options of imputation in SPSS, and the imputation methods handled in this study are limited to these five choices. These methods can be summarized as (Mertler and Vannatta, 2005), i.e. Series Mean, Mean of Nearby Points, Median of Nearby Points, Linear Interpolation and Linear Trend of Point. In this study, the best option is to apply the Median by calculating all samples as SPSS's default option. This study used the Median imputation in that the surveys utilized ordinal variables measured using Likert-scales.

Since this study uses Likert-scales for the sample, outliers do not exist in the data in that answering at the extreme (1 or 5) does not represent an outlier behavior. Another type of outlier is an unengaged respondent. Sometimes respondents will enter *'3, 3, 3, 3,...'* for every single survey item. This participant was clearly not engaged, and their responses will throw off the results. Other patterns indicative of unengaged respondents are *'1, 2, 3, 4, 5, 1, 2, ...'* or *'1, 1, 1, 1, 5, 5, 5, 5, 1, 1, ...'*. To reduce influence from unengaged response error to the results, this study removed any standard deviation with zero value answer, considered as an unengaged response error. Regarding the Multivariate outliers refer to records that do not fit the standard sets of correlations exhibited by the other records in the dataset. This study did not examine multivariate outliers problem due to its exploratory nature of this study.

Another test we conducted as part of the data cleaning process is normality and skewness. Normality refers to the distribution of the data for a particular variable. Skewness means that the responses did not fall into a normal distribution, but were heavily weighted toward one end of the scale. Moreover, Kurtosis refers to the outliers of the data distribution. Data that have outliers have significant kurtosis, which is not the case in this study. Data without outliers have low kurtosis. The kurtosis of the normal distribution is 0. The rule for evaluating whether or not kurtosis is acceptable is debatable the same way it is to Skewness, as there are many theories about Skewness and Kurtosis to be considered for normality. The values for asymmetry and kurtosis between -2 and +2 are measured commonly as acceptable to prove normal univariate distribution (George and Mallery, 2010). Hair et al. (2010) and Bryne (2010) also argued that data is measured to be normal univariate distribution if Skewness is between -2 to +2 and Kurtosis is between -7 to +7. From either view, the Skewness and Kurtosis of collected data in this study are within the acceptable ranges.

5.4 Treatment of Data

This study examined four generally-accepted types for the treatment of data, i.e. sampling, non-coverage, measurement, and non-response, of survey errors. By survey errors, this study considers factors that would reduce the accuracy of the survey estimate.

Sampling error is the error that arises when only a subset of the population is included in a sample survey (Weisberg, 2005). Usually, it can be reduced by having a large and random sample

from the population of interest. This study invited ten U.N. organizations to participate, and seven organizations accepted, for Survey 1, and three organizations participated in Survey 2. The sample population well represents U.N. as a whole in this study. The non-coverage error happens when certain members of the population are not included in the sample frame. In this study, all targeted U.N. organizations were contacted, and sampling was done completely random led by each CIO of the U.N. organizations, and with a multiple reminder attempts procedure to obtain the highest possible response rate.

Measurement error is the degree to which a survey statistics differs from its '*true*' value due to imperfections in the way the statistics are collected. The most common type of measurement error is when researchers deal with hypotheses by poor question wording, with faulty assumptions and imperfect scales. Both surveys of this study were constructed anchored in theory, scrutinized by other researchers, and pre-tested in one of U.N. organizations in 2015 to reduce this type of data errors. The survey items were all adopted from previous validated research.

No matter how carefully a sample is selected, some participants simply refused to respond to the survey. Dillman (1983, 1991 and 1999) follow-up method has been used as explained in the data collection section. Also, the surveys were made to appear easy and less time-consuming to complete, encouraging the respondents by explaining the purpose of the research briefly. Introducing the surveys entailed prior discussions with the CIO's to explain and demonstrate the value of this study to the U.N. organizations. Therefore, there was buy-in from senior management prior to the administration of the survey. However, the common concern was the organization's data that may be disclosed to the general public as a result of this study. This concern was about the reputation of the organization. In Survey 1, we checked the standard deviation to all samples and found no unengaged response error. In Survey 2, two samples were found with standard deviation close to zero; namely, a low standard deviation indicates that the data points tend to be close to the mean of the set, while a high standard deviation indicates that the data points are spread out over a wider range of values. Therefore, it means no response to the questionnaire. Both samples were excluded from the final dataset.

5.5 Analytical Approach

In this study, we execute three phases for our analysis, namely psychometric properties of the survey items, followed by an EFA and then SEM. Assessment of the measurement models was first performed. Assessment of the measurement model implies that individual item loadings and internal consistency reliabilities are examined as a test of reliability. As for discriminant validity (construct validity), items should load higher on their own construct than on the others used in the model, and the average variance shared between the constructs and their measures should be greater than the variances shared among the constructs themselves. After the assessment of the measurement models, the structural models were investigated by examining the path coefficients and their significance between the constructs as standardized beta weights in a regression analysis. R^2 values for dependent constructs are also produced. More details are presented in the following sub-sections.

5.5.1 Construct validity

The nature of latent variables underlying the measured group of items was analyzed using an EFA, and SEM analysis was performed with a maximum-likelihood (ML) estimation. Accordingly, we firstly carried out four independent EFA's applied to the change management, the strategic management, the results-based management, and the project management items sets. The IBM AMOS 22 for the CFA and Path analysis, therefore, it uses SPSS 22 as the analysis tool utilizing a maximum-likelihood factor analysis with a Promax rotation (Kappa=4) to explore the factor structure of the survey measures. A CFA was conducted measuring each management model independently, and to test whether the measured items load on one common factor (due to common method variance) (Podsakoff et al., 2003) or they represent distinct constructs (as theoretically expected). After that, this study will also test the research model on the effect of integrated management model with all items in the samples. To evaluate the results of CFAs, this study analyzed conventionally accepted goodness-of-fit indices and used the indices including Normed Fit Index (NFI), Comparative Fit Index (CFI), Root Mean Square Error of Approximation (RMSEA), Standardized Root Mean Square Residual (SRMR) and Chi-square/degree of freedom to assess the model fit.

This theory-driven exploratory study in the CFA is conducted to validate the findings of the EFA. Also, this study examines the reliability and validity of the constructs used in the conceptual model. Therefore, CFA models were reviewed with the aim of providing a final empirical validation that all items and scales used in the study are sufficiently valid. After consideration of the literature dealing with different estimation methods offered through AMOS against the objectives of this study and the characteristics of data collected, this study employed ML, a widely used estimation method and a default estimation method in AMOS is used. The reason for this decision is that ML is a full information technique, which is reliable in producing efficient and robust estimations against moderate violations of the normality assumption (Diamantopoulos and Siguaw, 2000). Also, ML estimation is accompanied by a collection of statistics that could be used to assess competing models. Thus, all constructs used in the study were subject to examination of reliability and validity of the measurement model through CFA.

5.5.2 Assessment of model fit

Chi-square test assessment To assess dimensionality and validity of a model, one should observe goodness of fit. The most commonly used index for assessment of the overall goodness of fit is the Chi-square test ($\chi 2$). Therefore, significant values of the Chi-square test suggest a strong divergence between the data and the model, implying a rejection of the model. Even though it is one of the most commonly used measures proposed to use on the data size smaller than 200 samples, conclusions on model fit based solely on Chi-square test are often ignored since it is known that the Chi-square test is influenced by sample size (Shah and Goldstein, 2006). Therefore, scholars often examine the ratio of Chi-square to degrees of freedom, since this ratio corrects the $\chi 2$ measure for model size. Values between 1 and 3 are desired, since values smaller than 1 indicate an over-fitted model, while higher values (>3.0) indicate an under-parameterized model (Schumacker and Lomax, 2010). In order to balance the disadvantages of Chi-square statistics, several alternative fit indices have been developed. Fit indices are commonly classified into three general groups: absolute, incremental and parsimony fit measures (Bollen and Lennox, 1991).

Absolute measures of fit assessment Besides the basic measure of absolute fit (Chi-square test), often employed measures are Root Mean Square Error of Approximation (RMSEA), (standardized) Root Mean Square Residual (RMR or SRMR), Goodness-of-Fit Index

(GFI) and Adjusted Goodness of Fit (AGFI). GFI and AGFI increase as the goodness of fit increases and are bounded above by 1.00, while RMSEA and RMR decrease as the goodness of fit increases and are bounded below by zero (exact cut-off values are presented in Table 5-6). SRMR and RMSEA reflect the residual differences between the input and implied matrices, indicating how well implied covariance matrices are predicted by the tested model (Hu and Bentler, 1999). This study uses RMSEA and SRMS as indices to assess the research model fit.

Incremental adequate measures assessment it compares the tested model to a null model, and to an ideal model, that perfectly represents the modeled phenomena in the particular population. The most commonly used incremental fit measures are e.g. Normed Fit Index (NFI), Non-normed Fit Index (NNFI), Tucker–Lewis Index (TLI), or CFI. This study employed NFI and CFI to assess the model fit.

Parsimony fit measures assessment These measures are intended to provide information about 'which model among a set of competing models is the best one, considering its relative complexity' (Hair et al., 2010, p. 669). In general, these indices favor more parsimonious models over more complex ones. Therefore, the more complex the model is, the lower the fit index is. Parsimony Normed Fit Index (PNFI) is the most widely accepted parsimony index. In addition to it, Akaike's Information Criterion (AIC) and the Expected Cross-validation Index (ECVI) are also in use (Hu and Bentler, 1999). Still, there are on-going debates about whether or not parsimony fit measures are appropriate for the assessment of the models. Therefore, this study did not use parsimony fit measures.

Measure Fit Type	Indices for Factor Analysis	Cut-off Point
Incremental fit measure	NFI (Bentler-Bonett Normed Fit Index)	NFI > 0.90 good fit (Salisbury et al. 2002); NFI > 0.8 reasonable fit (Hadjistavropoulos et al. 1999; Hair et al. 1998)
	CFI (Comparative Fit Index)	CFI > 0.90 (Bentler and Bonett 1980; Salisbury et al. 2002).
Absolute measure of fit	RMSEA (Root Mean Square Error of Approximation)	RMSEA < 0.01 excellent, <0.05 good, and <0.08 acceptable fit. (MacCallum et al., 1996)
	SRMR	SMRM < 0.1 acceptable; excellent < 0.08 (Benjamin P. L. and Gaskin J., 2014)

The Chi-square Test	Chi-square/DF	Between 1 and 3 (Benjamin P. L. and Gaskin J., 2014); Less than 5.00 (Schumacker and Lomax, 2004)

Table 13: Statistics Indices of Factor Analysis

In the literature, there has been considerable debate about the superiority and appropriateness of one index over another, and so far, no consensus on the appropriate index for assessing overall goodness-of-fit of a model has been reached (Ping, 2004). In addition to this, so far no definitive fit indices for fit assessment have been developed. Therefore, based on the extensive literature review that was briefly summarized above, we have decided to report multiple incremental, absolute and parsimony measures, by the cut-off criteria given in the table (Table 13) above. It should be noted that the optimal cut-off values presented in that table should not be taken for granted since those could vary considerably depending on sample size. Cut-off values for some indices, e.g. CFI, NFI predictably increased with sample size, whereas they decreased for SRMR, and RMSEA (Sivo et al., 2006).

5.5.3 Assessment of reliability

Reliability is an '*assessment of the degree of consistency between multiple measurements of a variable*' (Hair et al., 2010). The underlying idea of reliability is that all items or indicators used in one scale should be highly inter-correlated, meaning that they indeed are measuring the same thing. The traditional measure of internal consistency and reliability of constructs is Cronbach's (1951) Alpha. In contemporary research practice, it has become common to interpret a Cronbach's Alpha value of 0.7-0.8 as acceptable. However, lately, some arguments have been raised that this should not be taken as a rule. For example, Kline (2000) claims that for measuring psychological constructs values below 0.7 could be expected because of the diversity of the constructs being measured. Hair et al. (2009) also state that the cut-off value could be decreased to 0.6, especially in exploratory studies. Moreover, it is widely known that Cronbach's Alpha value increases as the number of measures increases (MacKenzie, Podsakoff, and Podsakoff, 2011), suggesting that the opposite could also happen (Cronbach's Alpha value decreases as the number of measures decreases). Besides Cronbach's Alpha (1951), Fornell and Larcker (1981) offered additional measures of reliability, Construct Reliability (CR) and Average Variance Extracted (AVE), which are derived from CFA results. CR has considered on the ratio of the variance

accounted for by the latent construct to the total variance in the measures. To indicate reliable measure, CR should be greater than 0.6 (Bagozzi and Yi, 1991) or 0.7. (Steenkamp and Van Trijp, 1991), while the AVE value has to be above the 0.5 thresholds (Fornell and Larcker, 1981). Therefore, to assess the reliability of the constructs. As Martínez-López, Gázquez-Abad, and Sousa (2013) suggest, this study adopt the Cronbach's Alpha (cut-off ≥ 0.6) together with the CR (cut-off ≥ 0.6), and AVE (cut-off ≥ 0.5) as an acceptable threshold level (Table 14).

Indices for Reliability	Cut-off Point
Cronbach's Alpha	$\alpha > 0.6$ (Hair et al., 2009)
Construct Reliability (CR)	CR > 0.6 (Bagozzi and Yi, 1991)
Average Variance Extracted (AVE)	AVE > 0.5 (Fornell and Larcker, 1981)

Table 14: Threshold Table of Indices for Reliability

5.5.4 The independence of data

This study was done through theory-based approach (see Table 8), namely each management model is based on their theories, publicly published in research articles that address the bias of inadequate pre-operational explication of constructs and mono-operations. With efforts to reduce experimenter expectations errors, the data were collected from seven U.N. organizations at headquarters level and regional offices level without providing research objectives, especially integration effect of the research model, to participants in advance.

CHAPTER 6 RESULTS AND DISCUSSION

This chapter starts with a short exploration of the profile of participants. Afterward, the focus of the chapter is in presenting the results of exploration and the purification of all items and scales used in this study. Starting with the time trend extrapolation (independent samples test) test followed by three analytical procedures: item analysis using EFA, dimensionality and validity assessment using CFA, and path analysis using SEM technique. The measurement model is analyzed for each proposed construct in both samples. The results of the UNIMM will be elaborated and discussed in the context of the United Nations.

6.1 Profile of Participants

The analysis encompasses one hundred sixty-two participants from seven U.N. organizations for Survey 1 and one hundred seventeen participants from three U.N. organizations for Survey 2, respectively. Thus, the first survey, was designed to collect change management data, by deletion of both blank answers and invariance answers owing to non-response error in the dataset. One hundred forty-one samples were usable in this study. The second survey was designed for collecting data regarding U.N. strategic management, U.N. results-based (performance) management, and U.N. project management practices. After removing nine unusable data samples, 108 usable samples from Survey 2 remained for analysis in the study.

The demographic profile of participants is presented in Tables 15, 16 and 17, which shows that participants are relatively well distributed across gender (male to female ratio closing to 2:1). In Survey 1, 62.96% of the participants reported to have less than five years', 13.89% have more than five years but less than eleven years, and more than 23.15% with more than a decade of U.N. experience. In Survey 2, 56.73% of the participants have less than five years', more than 17.74% have more than five years but less than eleven years, and more than 25.53% with more than a decade of U.N. experience. All participants would have at least a university degree for them to be qualified to participate in this survey.

Gender	Frequency	Percentage
Male	173	69.48%
Female	76	30.52%
U.N. Experience		
3 To 5 years	149	59.60%
6 to 10 years	40	16.00%
Greater than 10 years	61	24.40%

Table 15: All Survey: Demographic Information

Gender	Frequency	Percentage
Male	100	70.92%
Female	41	29.08%
U.N. Experience		
3 To 5 years	81	56.73%
6 to 10 years	25	17.74%
Greater than 10 years	36	25.53%

Table 16: Survey 1: Demographic Information

Gender	Frequency	Percentage
Male	73	67.59%
Female	35	32.41%
U.N. Experience		
3 To 5 years	68	62.96%
6 to 10 years	15	13.89%
Greater than 10 years	25	23.15%

Table 17: Survey 2: Demographic Information

6.2 Assessment of Non-Response Bias

Before going into further analysis, non-response bias should be assessed. Anonymity was guaranteed to all U.N. participants to address a concern related to reputation risk to the organization. Yet, at the same time, because of their anonymity, it was not possible to identify non-respondents and contact them to ask for a reason for their non-response.

Accordingly, the Time Trend Extrapolation test suggested by Armstrong and Overton (1977) is used to examine non-response bias. The test is conducted by comparing the first and the last quartile (according to their time of response) of respondents. Results are presented in Table 18

(descriptive statistics) and Table 19 (independent sample test). No significant differences were identified, suggesting that non-response bias is unlikely to present any problems for the analysis results. These tests for non-responsive bias were not examined for the change management dataset as change management will not be considered for integrated effects of the research models.

Group Statistics

Construct	Group	N	Mean	Std. Deviation	Std. Error Mean
PM1F	G1	27	1.9188	.61672	.11869
	G2	27	1.8800	.91533	.17616
PM2F	G1	27	1.7309	.63723	.12264
	G2	27	1.6594	.54899	.10565
PM3F	G1	27	1.9934	.80205	.15436
	G2	27	1.8198	.65597	.12624
PM4F	G1	27	1.4321	.60366	.11618
	G2	27	1.4017	.47676	.09175
SM1F	G1	27	3.0300	.97940	.18849
	G2	27	3.2986	1.10508	.21267
SM2F	G1	27	3.3741	1.33003	.25596
	G2	27	3.0490	1.44888	.27884
SM3F	G1	27	2.5351	.99317	.19114
	G2	27	2.5080	.98692	.18993
SM4F	G1	27	3.2222	1.47631	.28412
	G2	27	2.9259	1.41220	.27178
RBM1F	G1	27	4.2678	1.24029	.23869
	G2	27	3.8636	1.00559	.19353
RBM2F	G1	27	2.7407	1.22765	.23626
	G2	27	2.4444	1.21950	.23469
RBM3F	G1	27	4.2772	1.47332	.28354
	G2	27	4.1260	1.22054	.23489
RBM4F	G1	27	3.4730	.93908	.18073
	G2	27	3.5599	1.18352	.22777

Table 18: Statistical Description

	Levene's Test for Equality of Variances	t-test for Equality of Means

	F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
PM1F	3.926	.053	.183	52	.856	.03883	.21241	-.38740	.46506
PM2F	1.303	.259	.441	52	.661	.07145	.16187	-.25337	.39626
PM3F	.606	.440	.871	52	.388	.17364	.19941	-.22649	.57378
PM4F	.371	.545	.206	52	.838	.03048	.14804	-.26658	.32754
SM1F	.036	.850	-.945	52	.349	-.26863	.28418	-.83888	.30161
SM2F	.024	.879	.859	52	.394	.32516	.37851	-.43437	1.08469
SM3F	.085	.772	.100	52	.920	.02703	.26946	-.51367	.56773
SM4F	.311	.579	.754	52	.454	.29630	.39317	-.49266	1.08526
RBM1F	1.542	.220	1.315	52	.194	.40417	.30729	-.21245	1.02079
RBM2F	.004	.949	.890	52	.378	.29630	.33302	-.37195	.96454
RBM3F	2.879	.096	.411	52	.683	.15118	.36820	-.58766	.89002
RBM4F	.958	.332	-.299	52	.766	-.08693	.29076	-.67038	.49652

Table 19: Independent Samples Test

6.3 Validity and Reliability

6.3.1 Reliability statistics of aggregated scales

The reliability of aggregated scales was firstly assessed using Cronbach's alpha coefficient of internal consistency (see Table 20). This study adopted Hair et al. (2009) Cronbach's Alpha, is greater than 6.0, for describing internal consistency. The results from two survey all meet the acceptable level.

		Reliability Statistics		
		Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
Survey 1	Change Management	0.813	0.81	25
Survey 2	Strategic Management	0.781	0.788	24
	Project Management	0.944	0.948	25
	Results-based Management	0.951	0.946	30
	Overall (Survey 2)	0.933	0.935	79

Table 20: Cronbach's Alpha Reliability Test

6.4 Exploratory Factor Analysis: Validation to U.N. Context

Several analyses that were conducted to examine the data followed a two-step approach as proposed by Anderson and Gerbing (1988). The essence of the two-step approach to theory testing and development is the distinction between exploratory and confirmatory analysis. Consequently, the two-step approach considers that one should first separately estimate a measurement model, and then secondly test the relationship between latent variables through the structural model. The analysis of the measurement model is examined through EFA and CFA. EFA is used with the aim of understanding the data from a traditional (non-confirmatory) perspective. Also, this study wanted to gain insight into the structure of individual factors through EFA analysis. The EFA results are followed by the CFA assessment of dimensionality, convergent validity, construct reliability, and discriminant validity, which were explained earlier. On the subject of factoring extraction method, the ML was used as data reduction technique that was usually employed in a case where there is already a predetermined factor structure subsumed in the proposed theoretical framework (Hair et al., 2010). To ensure consistency in the data extraction method, this study used the ML factoring extraction method because of AMOS using ML as the default method for testing CFA and Path analysis.

6.4.1 EFA of change management (CM) constructs

The initial results of EFA produce eight factors for the six dimensions shows in Table 21. The Bartlett test of Sphericity was significant for the CM dataset (approx. Chi-square = 774.767; Degree of Freedom (DF) = 300; significant (sig) = 0.000) with the Kaiser-Meyer-Olkin (KMO) measure of Sampling Adequacy values of 0.701, that confirmed that the data is appropriate to run an EFA. The number of factors was determined based on theoretical considerations. This eight-factor solution was specified (as per the original number of constructs) using the Promax rotation with Kaiser Normalization, whereby 59.016 % of the total variance could be explained. However, with this eight-factor solution, many low factor loadings present. After removing the factors with low loading and cross loading items (CM1, CM6, CM7, CM8, CM11, CM16, CM17, CM18, CM19, and CM22), a five-factor solution emerged as presented in Table 22.

Change Management		
Original Constructs	Original Items	Item Code
Individual Response to Change	People invariably resist change	CM1
	Lacking freedom of choice about change usually provokes more resistance than change itself	CM5
	Managing resistance to change is more difficult than managing apathy about change	CM12
Planning Change	A highly effective, early step in managing change is to surface dissatisfaction with the current state	CM6
	'Protect one's territory,' both individual and group, are usually the greatest obstacle to systemic change	CM14
	The first question asked by most people about organizational change concerns the general nature of the future state	CM15
	The planning of change should be done by a small, knowledgeable group that communicates its plans on completion of this task	CM9
	Organizational change is typically a response to external environmental pressures rather than internal management initiatives	CM23
	Leaders find it more difficult to change organizational goals than to change the ways to reach those goals	CM17
	The articulation of the organization's future state by its leaders is one of the most important aspects of a successful change effort	CM2
Managing the 'People' side of Change	The most difficult aspect of any change effort is the determination of the vision for the future state	CM3
	In any change effort, communicating what will remain the same is as important as communicating what will be different	CM4
	A common error in managing change is providing more information about the process than is necessary	CM7
	As movement toward a new future begins, members of an organization need both time and opportunity to disengage from and grieve for the loss of the present state	CM8
	In any change effort, influencing people one-on-one is more effective than in small groups	CM11
	A change effort routinely should begin with modifications of the organization's structure	CM20

Managing the 'Organizational' side of Change	The more members of an organization are involved in planning the change, the more they will be committed to the change effort	CM21
	Symbols, slogans, or acronyms that represent organizational change typically reduce the effectiveness of the effort rather than add to it	CM16
	In managing change, the reduction of restraints or barriers to the achievement of the end state is more effective than increased pressure toward that end state	CM24
Evaluating the Change effort	Complaints about the change effort are often a sign of progress	CM13
	Successful change efforts typically require changing the reward systems to support the change	CM18
	Our strategies often have to be changed because certain groups block their implementation	CM22
	With little information about the progress of a change effort- people will typically think positively	CM19
General Nature of Change	Despite differences in organizational specifics, certain clear patterns typify all change efforts	CM10
	Effective organizational change requires certain significant and dramatic steps or leaps' rather than moderate incremental ones	CM25

Table 21: Change Management Original Construct

(Same as Table 9 but organized by dimensions)

With the criterion of minimal factors loading of 0.5, a five-factor solution was found with evidence that the KMO measure is above the accepted level with the value of 0.652 and Bartlett's Test of Sphericity (Chi-square = 337.378; DF = 105; sig < 0.00). In additional, all items have factors loadings well above 5.0, which is satisfactory (Table 22). Since this dataset was conducted separately from the second survey, this study will not test the effect of integration with other three management datasets, i.e. the strategic management, the results-based management and the project management.

Pattern Matrix

Item Code	Component				
	1	2	3	4	5
CM4	.781				
CM2	.688				

CM13	.617				
CM3	.546				
CM14	.521				
CM23		.853			
CM20		.809			
CM25		.560			
CM12			.807		
CM9			.750		
CM10			.565		
CM5				.712	
CM21				.694	
CM24					.679
CM15					.631

Table 22: EFA: Final Pattern Matrix Table

Even though this study will not test this dataset in the research model, we still test it for CFA to investigate a model fit. The results from CFA showed that all indices meet the acceptable threshold (Table 23).

CM Measure Fit Type	Indices for Model Fit		Interpretation
Incremental fit measure	NFI (Bentler-Bonett Normed Fit Index)	0.905	Acceptable
	CFI (Comparative Fit Index)	0.951	Acceptable
Absolute measure of fit	RMSEA (Root Mean Square Error of Approximation)	0.042	Acceptable
	SRMR	0.062	Acceptable
The Chi-square test	CMIN/DF	1.244	Acceptable

Table 23: Model Fit Measures for Change Management Model

Discussion: Change Management Research Model

Changes in U.N. have triggered a feel of an urgency driven by external and internal initiators that are inevitable for the U.N. organizations. In a literature review, an integrated process framework is presented. Different elements are postulated in the model – individual response to change, general nature of change, planning change, managing the people side of change, managing

organization side of change, and evaluating change efforts. Therefore, this study explores the constructs of U.N. change management for understanding (see Table 24 below).

New Identified Factors	Item Code	Original Theory Factors	Survey Question
CM1F (Communication)	CM2	Planning Change Managing the 'People' side of Change Evaluating the Change effort	The articulation of the organization's future state by its leaders is one of the most important aspects of a successful change effort
	CM3		The most difficult aspect of any change effort is the determination of the vision for the future state
	CM4		In any change effort, communicating what will remain the same is as important as communicating what will be different
	CM13		Complaints about the change effort are often a sign of progress
	CM14		'Protect one's territory,' both individual and group, are usually the greatest obstacle to systemic change
CM2F (Transparency)	CM20	Planning Change Managing the 'Organizational' side of Change General Nature of Change	A change effort routinely should begin with modifications of the organization's structure
	CM23		Change often a response to external factors rather than internal management initiatives
	CM25		Change requires certain significant steps or leaps rather than moderate incremental ones
CM3F (Culture)	CM9	Planning Change Individual Response to Change General Nature of Change	The planning of change should be done by a small and knowledgeable group
	CM10		Certain clear patterns typify all change efforts
	CM12		Managing resistance is more difficult than managing apathy about change
CM4F (Participation)	CM5	Individual Response to Change	Lack of freedom of choice provokes more resistance than change itself

	CM21	Managing the 'Organizational' side of Change	More people involved in planning the change will be more committed to the change effort
CM5F (Resistance)	CM15	Planning Change Evaluating the Change effort	The first question asked by most people about organizational change concerns the general nature of the future state
	CM24		In managing change, the reduction of restraints or barriers to the achievement of the end state is more effective than increased pressure toward that end state

Table 24: New Constructs for U.N. Change Management Research Model

From an organization perspective, U.N. organizations possess a powerful immune system with strong supports from the government, the governing body, staff member and which defends the status quo and resists change. On the other hand, the second problematic challenge U.N. facing comes from the mixture of political agenda and secretariat programme priority that include the significant influence of the government power and the political links among the secretariat, top management group, and the governing bodies. They often are the external change drivers to U.N. and also are the root causes of various resistances from the internal. If a change is against its natural political interest, that leads all discussions difficult to continue and often also fail in the end. While any effort put on U.N. management reform, it cannot be ignored the effect of departmentalization, which is part of an organizational culture long embedded in the U.N. This departmentalization is different from other sectors', it is more in line with the political interest of each state.

In the literature, existing change theories put great efforts on addressing the institutional management and behavior problems. However, only a few answered the second phenomenon existing in the U.N. context. Based on the Managing Change model (Burke, 1988; Burke and Spencer, 1990; Burke *et al.,* 1991, 1993) offers an opportunity to explore new constructs. Accordingly, we could elaborate the new components' characteristics, are significant to U.N. context, as following:

1. Component 1 (CM1F: Communication): Samples are loaded on a new component with common characteristics in better communication, making staff clear on vision and the future state of change, and making the change process in progress, which is leadership. Therefore,

it meets our discussions in chapter two and chapter four that communication and transparency are the critical factors of this component to the success of U.N. management reform.

2. Component 2 (CM2F: Transparency): The second component has featured in planning process including structure change and influence from external forces that are general discussions during the course of change planning period.
3. Component 3 (CM3F: Culture): In this component, we identified three items clear related to resistance and apathy, and patterns typifying change (beliefs) that all can be grouped into cultural and organizational pressures dimension.
4. Component 4 (CM4F: Participation): I also identified staff involvement, as well as freedom of choice (discussion about change), are encouraged the success of change in U.N. that meet what we discussed the U.N. challenges in chapter four. This component can be grouped as staff participation.
5. Component 5 (CM5F: Resistance): In this component, it addressed the concerns about uncertainty and resistance. As discussed in chapter two about U.N. change that obviously, these two concerns are common to all organizations including U.N. organizations.

6.4.2 EFA of strategic management (SM) constructs

The first dataset (SM Dataset) from Survey 2 were tested for factor analysis. The Bartlett test of Sphericity was significant for SM data (approx. Chi-square = 1246.306; DF = 276; sig = 0.000) with the KMO measure of Sampling Adequacy values of 0.818, that confirmed that the data is appropriate to run an EFA.

Strategic Management		
Original Constructs	Original Items	Item Code
Command	The strategy we follow is directed by a vision of the future associated with the chief executive (or another senior Figure)	SM5
	Our strategy is closely associated with a particular individual	SM11
	The chief executive determines our strategic direction	SM17
	Our chief executive tends to impose strategic decisions (rather than consulting the top management team)	SM23

Cultural	There are beliefs and assumptions about the way to do things which are specific to this organization	SM9
	Our culture dictates the strategy we follow	SM15
	Our organization's history directs our search for solutions to strategic issues	SM3
	There is resistance to any strategic change which does not sit well with our culture	SM21
Enforced Choice	Our business environment severely restricts our freedom of strategic choice	SM6
	We are not able to influence our business environment; we can only buffer ourselves from it	SM12
	Barriers exist in our business environment which significantly restricts the strategies we can follow	SM18
	Many of the strategic changes which have taken place forced on us by those outside this organization	SM24
Incrementalism	Our strategies emerge gradually as we respond to the need to change	SM14
	To keep in line with our business environment, we make continual small-scale changes to strategy	SM2
	I keep early commitment to a strategy tentative	SM8
	Our strategy develops through a process of ongoing adjustment	SM20
Planning	Our strategy is made explicit in the form of precise plans	SM13
	I have precise procedures for achieving strategic objectives	SM7
	I have definite and precise strategic objectives	SM1
	I make strategic decisions based on a systematic analysis of our business environment	SM19
Political	The information on which our strategy is developed often reflects the interest of certain groups	SM4
	Our strategy is a compromise which accommodates the conflicting interests of powerful groups and individuals	SM10
	The decision to adopt a strategy is influenced by the power of the group sponsoring it	SM16

	Our strategies often have to be changed because certain groups block their implementation	SM22

Table 25: Strategic Management Construct Table

The number of factors was determined based on theoretical considerations. For the SM dataset, a seven-factor solution was initially specified using the Promax rotation with Kaiser Normalization whereby 70.928 % of the variance could be explained (see Table 25 above). The rotated factor solution was interpreted using both structure and pattern matrices (see Table 26, Table 27, and Table 28). While the structure matrix represents a factor-loading matrix with the overall variance in a measured variable explained by a factor, the pattern matrix contains coefficients, which just represent unique contributions of each factor. By looking at both structure and pattern matrix, the factors were interpreted.

Total Variance Explained							
	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings
Factor	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	6.332	26.385	26.385	3.591	14.961	14.961	4.835
2	4.282	17.843	44.228	4.645	19.353	34.314	4.243
3	1.723	7.179	51.407	2.417	10.072	44.386	2.973
4	1.315	5.480	56.887	1.125	4.689	49.075	2.768
5	1.179	4.913	61.800	.873	3.636	52.711	3.213
6	1.105	4.602	66.402	.868	3.615	56.326	2.155
7	1.086	4.526	70.928	.614	2.559	58.885	2.225

Table 26: First EFA for Strategic Management - Total Variance Explained Table

Factor loadings above 0.4 were assessed.

Item Code	Factor						
	1	2	3	4	5	6	7
SM24	.739					.521	
SM23	.727						
SM6	.713			.518			

SM11	.697						
SM12	.681	-.411		.428			
SM21	.595			.423			
SM15	.533			.490			
SM17	.487						
SM7		.871	.505		.526		
SM13		.831			.444		
SM19		.813			.586		
SM5		.475	.421				
SM1			.790		.442		
SM2		.425	.729		.402		
SM8			.598				
SM18	.532			.788			
SM9				.624			
SM20		.581	.454		.992		
SM14		.491			.703		
SM16						.855	
SM10				.449		.513	
SM4							
SM22	.651						.705
SM3			.498				-.596

Table 27: EFA: Initial Structure Matrix Table

Item Code	Factor						
	1	2	3	4	5	6	7
SM23	.825						
SM24	.713						
SM12	.658						
SM11	.649		-.440				
SM17	.621						
SM6	.558						
SM21	.521						
SM15	.404						
SM13		.837					
SM7		.776					
SM19		.725					

SM5		.420					
SM4							
SM1			.771				
SM2			.606				
SM8			.556				
SM9				.676			
SM18				.675			
SM20					.934		
SM14					.609		
SM16						.840	
SM10						.404	
SM3							-.598
SM22	.504						.582

Table 28: EFA: Final Pattern Matrix Table

(Included only for strategic management to demonstrate the process, also used in next management models)

After removing items, SM4, SM5, SM8, SM10, SM12, SM14, SM15, SM16, SM20, and SM21 by reasons of low data loading (cut off is 0.5) and cross-loadings (loading difference between factors is less than 0.2), a four-factor solution was confirmed in the sample (Table 30). It is evident that the KMO measure is above the accepted level with the value of 0.797 and Bartlett's Test of Sphericity (Chi-square = 671.288; DF = 91; sig = 0.000). A final four-factor solution was specified using the Promax rotation with Kaiser Normalization whereby 69.844% of the variance could be explained. In additional, all items have factors loadings well above 5.0, which is satisfactory for the purpose. Therefore, all identified items used in this EFA are forwarded for CFA assessment (see Table 30 below).

Total Variance Explained							
Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	4.447	31.765	31.765	4.032	28.8	28.8	3.382
2	2.762	19.73	51.495	2.336	16.685	45.485	3.049

3	1.407	10.047	61.542	1.037	7.408	52.893	2.54
4	1.162	8.303	69.844	0.82	5.854	58.747	2.03

Table 29: Final EFA for Strategic Management - Total Variance Explained Table

Item Code	Factor			
	1	2	3	4
SM24	.869			
SM23	.840			
SM22	.606			
SM11	.558			
SM17	.547			
SM6	.541			
SM19		.827		
SM13		.825		
SM7		.789		
SM1			.924	
SM2			.608	
SM3			.539	
SM18				.833
SM9				.633

Table 30: SM: EFA Pattern Matrix Table

Discussion: Strategic Management Research Model

Existing literature on strategic management attempts to demonstrate theoretically and empirically a variety of the strategy planning as well as development process, and it is widely accepted that concept that strategy development is multidimensional in nature (Fredrickson, 1983; Derkinderen and Crum, 1988; Eisenhardt and Zbaracki, 1992; Bailey and Johnson, 1996). In terms of strategic management, it is commonly agreed that it comprises three main management components, i.e. strategic planning, strategic development, and strategic implementation, respectively. The research model was built on the foundation of the strategic process beginning with strategic planning and strategic development components, based on Bailey's (2000) six dimensions multidimensional model that fit U.N. context in that it is a sector-independent model, and the model comes with consideration of external power and political influence that are critical

to assessing U.N. context. Finally, this results from EFA identified data loaded on a four-factor management model, elaborated in Table 31.

Component	Item Code	Theory Factors	Items
SM1F	SM6	Enforced Choice	Our freedom of strategic choice is severely restricted by our business environment
	SM22	Political	Our strategies often have to be changed because certain groups block their implementation
	SM11	Command	Our strategy is closely associated with a particular individual
	SM23		Our chief executive tends to impose strategic decisions (rather than consulting the top management team)
	SM24		Many of the strategic changes which have taken place forced on us by those outside this organization
SM2F	SM7	Planning	I have precise procedures for achieving strategic objectives
	SM13		Our strategy is made explicit in the form of precise plans
	SM19		I make strategic decisions based on a systematic analysis of our business environment
SM3F	SM1	Planning	I have definite and precise strategic objectives
	SM2	Incrementalism	To keep in line with our business environment we make continual small-scale changes to strategy
	SM3	Cultural	Our organization's history directs our search for solutions to strategic issues
SM4F	SM9	Cultural	There are beliefs and assumptions about the way to do things which are specific to this organization
	SM18	Enforced Choice	Barriers exist in our business environment which significantly restrict the strategies we can follow

Table 31: New Constructs for U.N. Strategic Management Research Model

6.4.3 EFA of results-based management (RBM) constructs

The RBM Dataset from Survey 2 was measured for suitability for factor analysis. Similarly to SM analysis process, by removing items, RMB1, RMB2, RMB5, RMB6, RMB7, RMB8, RMB9, RMB12, RMB19, RMB20, RMB24, RMB26 and RMB28 as a result of low data loading and cross loadings, the original six factors were reduced to a four-factor solution that was confirmed from the sample (Table 34).

Results-based Management		
Original Constructs	Original Items	Item Code
Culture and Leadership	My organization encourages risk taking and mistakes in the pursuit of better performance (means better results).	RBM1
	In my organization, it is more important to achieve better performance in results than to follow the process and deliver outputs.	RBM2
	Adequate trained resources are available for operating the program performance management system.	RBM3
	Adequate staff time allocated for operating the results-based management system.	RBM4
	An adequate budget is made available for operating the results-based management system.	RBM5
Programme Focus	The main value of existing management practice is in allowing us to focus our programme by saying no to political influence in non-strategic areas	RBM6
	My organization's outcomes are developed through a collaborative process with involvements of all stakeholders (government, other U.N. organizations, development partners, civil society)	RBM7
	It is normal that policy and planning decisions are informed by empirical evidence on past performance.	RBM8
	The organization in my office is structured to deliver the outcomes	RBM9
	I can confidently explain to my colleagues and development partners the difference between an output and an outcome	RBM10
	I can explain clearly how outputs contribute to programme outcomes	RBM11
	The focus of management in my responsible areas is the achievement of outcomes rather than implementation of individual projects	RBM12

Monitoring and reporting	My organization has an effective outcome monitoring tool	RBM13
	My organization has more than one monitoring tool in use at different management levels, such as HQ, regional offices, and country offices.	RBM14
	Monitoring and reporting are well harmonized with other development partners and make use of region/state/field office reporting systems	RBM15
Adjustment and learning	Stakeholders and managers collectively analyze performance and decide on action	RBM16
	Business managers have the latitude, flexibility, and authority to arrange resources (financial and personnel) as required to achieve the desired outcomes	RBM17
	There is a clear link between allocation of required resources and mandated programme and evidence of results in my office programme	RBM18
	I have little scope in allocating resources across our programme or within outcome areas according to results	RBM19
	Whether positive or negative, performance information is used to foster learning	RBM20
	There are an effective follow-up and actions taken on management response to performance evaluations	RBM21
Evaluation and accountability	Roles and responsibilities at all levels in my organization are clearly set out and known to staff	RBM22
	My organization is demonstrating a proven ability to raise resources and in delivery	RBM23
	Department head is accountable for achievement of programme outcomes	RBM24
	Department head can only be held accountable for delivery of organization's outputs	RBM25
	In my office, staff are under more pressure to ensure timely delivery than to achievement of the outcomes	RBM26
Support systems	I can easily find guidelines and support from my supervisors to help design objectives and indicators for projects and programmes	RBM27
	The training I have received has equipped me with the ability to plan and manage for outcomes	RBM28
	In our office, adequate time and structured occasions are made available to learn from results and evaluations.	RBM29

	My organization's rewards systems provide real incentives for strengthening a results culture within the organization	RBM30

Table 32: Results-Based Management (Performance Management) Construct Table

The results shown from this four-factor solution, the KMO measure is above the accepted level with the value of 0.897 and Bartlett's Test of Sphericity (Chi-square = 1533.916; DF = 136; sig < 0.00). A final four-factor solution was specified using the Promax rotation with Kaiser Normalization whereby 76.684% of the variance could be explained (Table 33). In additional, the criterion of minimal factors loading of 0.5 is applied in Table 34 below. All items have factor loadings that are satisfactory for EFA. Goodness-of-fit test shows Chi-square = 136.998; DF = 74; sig < 0.00.Therefore, all identified items in RBM dataset used in this EFA can be further validated for CFA assessment (Table 34).

Total Variance Explained							
Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	9.204	54.142	54.142	2.672	15.718	15.718	8.576
2	1.787	10.509	64.651	7.716	45.387	61.105	3.134
3	1.251	7.36	72.011	0.619	3.641	64.746	6.786
4	0.794	4.672	76.684	0.738	4.34	69.085	4.592

Table 33: Final EFA for Results-based Management - Total Variance Explained Table

Item Code	Factor			
	1	2	3	4
RBM13	.970			
RBM15	.965			
RBM14	.944			
RBM22	.763			
RBM21	.723			
RBM23	.652			
RBM30	.615			
RBM16	.592			
RBM29	.523			

RBM27	.522			
RBM11		.931		
RBM10		.853		
RBM3			.928	
RBM4			.811	
RBM17				.637
RBM18				.585
RBM25				.511

Table 34: RBM: EFA Pattern Matrix Table

Discussion: Results-Based (Performance) Management Research Model

In recent years, each U.N. organization has placed significant efforts on integrating performance data, such as key performance indicators, and using them to evaluate the programme as well as to monitor personnel performance regularly. There is no doubt, integrating performance data from performance measurement have become a common component in management (Kettl, 1997; Moynihan, 2006; Norman, 2002; OECD, 1997; Pollitt and Bouckaert, 2000; Wholey and Hatry, 1992; Zapico and Mayne, 1997). U.N. organizations have widely adopted the similar corporate performance management to systematically improve its programme outputs, outcomes, and results (such as UNDP, 2004). Reflecting OECD findings, Curristine (2005a: 150) concluded, '*The performance orientation in public management is here to stay. It is essential for successful government'*. Such efforts are linked with the sweeping reforms undertaken in many public sectors over the past 20 years (Aucoin, 1995; OECD, 2005; Pollitt and Bouckaert, 2000; Schick, 2003). To improve programme's performance and to enhance secretariat's accountability, most management reforms aimed to free managers from upfront controls and reduce the emphasis on compliance, while requiring better monitoring, measuring and accounting for the results that are being obtained from the expenditure of member-states' finance contributions. It is also clear that, while much has been learned, many challenges remain as few U.N. organizations would argue that they have been completely successful in integrating performance information into their management and budgeting. Performance management is not only about integrating data. Only the effectiveness of the performance management model will bring efficiency to the organization. U.N. propose a six-dimension model, namely Monitoring and Report, Adjustment and Learning, Evaluation and Accountability, Support System, Program Focus, and Culture, and Leadership. However, that management practice was not fully yet studied in factor analyses to prove its

significance in the U.N. context. This research, we found most data loaded in one factor, RBM1F together than that did on others. Also, clearly, all Program Focus items were only landed on RPM2F, and all items from Culture and Leadership were concentrated on RBM3F, respectively, while all Adjust and Evaluation (continuous improvement) items are loaded on RBM4F (see Table 35).

Component	Item Code	Theory Factors	Items
RBM1F	RBM13	Monitoring and Reporting	My organization has an effective outcome monitoring tool.
	RBM14	Adjustment and Learning	My organization has more than one monitoring tool in use at different management levels, such as HQ, regional offices, and country offices.
	RBM15	Evaluation and Accountability	Monitoring and reporting are well harmonized with other development partners and make use of region/state/field office reporting systems.
	RBM16	Support Systems	Stakeholders and managers collectively analyze performance and decide on action.
	RBM21		There are an effective follow-up and actions taken on management response to performance evaluations.
	RBM22		Roles and responsibilities at all levels in my organization are clearly set out and known to staff.
	RBM23		My organization is demonstrating a proven ability to raise resources and in delivery.
	RBM27		I can easily find guidelines and support from my supervisors to help design objectives and indicators for projects and programmes.
	RBM29		In our office, adequate time and structured occasions are made available to learn from results and evaluations.
	RBM30		My organization's rewards systems provide real incentives for strengthening a results culture within the organization.
RBM2F	RBM10	Program Focus	I can confidently explain to my colleagues and development partners the difference between an output and an outcome.

	RBM11		I can explain clearly how outputs contribute to programme outcomes.
RBM3F	RBM3	Culture and Leadership	Adequate trained resources are available for operating the program performance management system.
	RBM4		Adequate staff time allocated for operating the results-based management system.
RBM4F	RBM17	Adjustment and Learning	Business managers have the latitude, flexibility, and authority to arrange resources (financial and personnel) as required to achieve the desired outcomes.
	RBM18	Evaluation and Accountability	There is a clear link between the allocation of required resources and mandated programme and evidence of results in my office programme.
	RBM25		Department head can only be held accountable for the delivery of organization's outputs.

Table 35: New Constructs for U.N. Performance Management Research Model

6.4.4 EFA of project management (PM) constructs

The third dataset (PM Dataset) from Survey 2 was tested for suitability for factor analysis. The same process used for the other data sets was followed by PM analysis. By removing items, PM5, PM8, PM9, PM11, PM14, PM15 PM16, PM18, PM19 and PM25 due to low data loading and cross loadings, a four-factor solution is found in PM dataset (Table 38).

Project Management		
Original Constructs	Original Items	Item Code
Ability of Project Manager	To communicate at multiple levels	PM1_1
	To deal with ambiguity	PM1_2
	To coordinate team works and opinions	PM1_3
	With effective leadership	PM1_4
	With technical knowledge and hands-on experience	PM1_5
	With self-commitment to the project success	PM1_6
	With right competence in project management	PM1_7
	A clear project boundary	PM2_1

Effectiveness of Project Management	End-user commitment	PM2_2
	Adequate funds/resources	PM2_3
	Project realistic schedule/time	PM2_4
	Clear goals/objectives	PM2_5
	Project mission being in line with organization's strategic objectives	PM2_6
Ability of Project Team members	Required technical background/technical skills	PM3_1
	Right communication skill with client	PM3_2
	Effective project monitoring and response to feedback	PM3_3
	Commitment to the project success	PM3_4
	Required troubleshooting skills in different stages of project lifecycle	PM3_5
	Proper personnel	PM3_6
Organization and Environment	Effective project executive board	PM4_1
	Clear staff job description and responsibilities	PM4_2
	Top management support	PM4_3
	Project governing body structure	PM4_4
	Functional/operational manager support	PM4_5
	Client acceptance	PM4_6

Table 36: Project Management Constructs

The results present that the KMO measure is above the accepted level with the value of 0.848 and Bartlett's Test of Sphericity (Chi-square = 1093.941; DF = 120; sig < 0.000). A final four-factor solution was specified using the Promax rotation with Kaiser Normalization whereby 73.201% of the variance could be explained (Table 37). In additional, the criterion of minimal factors loading of 0.5 is applied in Table 38 below. All items have factors loadings satisfactory for EFA. Goodness-of-fit test shows Chi-square = 130.452; DF = 62; sig = 000. Therefore, all identified items in PM data used in this EFA can be further validated for CFA assessment (Table 38).

Total Variance Explained							
Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total

1	7.341	45.883	45.883	6.925	43.28	43.28	5.25
2	1.959	12.247	58.13	1.424	8.90	52.18	5.95
3	1.293	8.082	66.212	1.121	7.01	59.18	3.43
4	1.118	6.989	73.201	0.823	5.15	64.33	3.74

Table 37: Final EFA for Project Management - Total Variance Explained Table

	Factor			
	1	2	3	4
PM1_1	0.869			
PM1_3	0.846			
PM1_2	0.824			
PM1_4	0.587			
PM3_4		0.882		
PM4_3		0.722		
PM4_5		0.694		
PM1_7		0.672		
PM1_6		0.659		
PM4_6		0.650		
PM4_1			0.779	
PM4_2			0.694	
PM4_4			0.685	
PM2_5				0.941
PM2_6				0.528
PM2_3				0.512

Table 38: PM: EFA Pattern Matrix Table

Discussion: Project Management Research Model

The Research model of project management is based on the Saadé and Wan (2015 and 2017) model, related to critical success factors in project management, which serves this study context, are based on the following two main articles: Pinto and Prescott (1988) and Hyvari (2006). The combination of these theories provides this study model to address the factors of interest at the project level (operational) (Pinto and Slevin, 1987) and the organizational level (addressing the vertical structure of organization) (Hyvari, 2006).

Component	Item Code	Theory Factors	Items

PM1F	PM1_1	Ability of Project Manager	To communicate at multiple levels
	PM1_2		To deal with ambiguity
	PM1_3		To coordinate team works and opinions
	PM1_4		With effective leadership
PM2F	PM3_4	Ability of Project Manager	Commitment to the project success
	PM4_3	Organization and Environment	Top management support
	PM4_5	Ability of Project team members	functional/operational manager support
	PM1_7		With right competence in project management
	PM1_6		With self-commitment to the project success
	PM4_6		Client acceptance
PM3F	PM4_1	Organization and Environment	Effective project executive board
	PM4_2		Clear staff job description and responsibilities
	PM4_4		Project governing body structure
PM4F	PM2_3	Effectiveness of Project Management	Adequate funds/resources
	PM2_5		Clear goals/objectives

Table 39: New Constructs for U.N. Project Management Research Model

Consequently, this study model examines the success factors of project management in the U.N. organizations, presently engaged in the process of integration of the project management approach to enhance the levels of project success. The conceptual model comprises four dimensions (Saadé and Wan, 2015 and 2017), i.e. the ability of project manager, the ability of project management team, the effectiveness of project management methodology and organizational environment. The results from this study support previous studies that the items from Project Management's Competency, Organization and Environment, and Effectiveness of Project Management are well loaded on PM1F, PM3F, and PM4F components, respectively, as theory presented. After examining the items in PM3F, we can conclude this factor is grouped based on the characteristics of project governing structure as well as its responsibilities. In contrast to PM2F, it has all items associated with project management environment in U.N. context, is more related to environmental context (see Table 39 above).

6.5 Confirmatory Factor Analysis (CFA)

This theory-driven exploratory study in the CFA is conducted to explore the relationships of final constructs and items of the EFA in Chapter 6.4. Consequently, CFA models were examined with the aim of providing a final empirical validation that all items and scales used in the study are sufficiently valid. After reviewing the literature dealing with different estimation methods offered through AMOS against the objectives of this study and the characteristics of data collected, this study employed ML, a widely used estimation method. The reason for this decision is that ML is a full information technique, which is reliable in producing efficient and robust estimations against moderate violations of the normality assumption (Diamantopoulos and Siguaw, 2000). Also, ML estimation is accompanied by a collection of statistics that could be used to assess competing models. Accordingly, all constructs used in the study were subject to examination of reliability and validity of the measurement model through CFA.

6.5.1 CFA of model fit measures

Kenny (2014) claims '*Model Fit*' refers to the ability of a model to reproduce the data (i.e., usually the variance-covariance matrix). A good-fitting model is one that is reasonably consistent with the data and so does not necessarily require re-specification. Obviously, it is always debatable as to what it means by '*reasonably consistent with the data.*' Also, a good-fitting measurement model is needed before interpreting the causal paths of the structural model. It should be noted that this study argues a good-fitting model is not necessarily a valid model. For instance, a model all of whose estimated parameters are not significantly different from zero is a 'good-fitting' model. Conversely, it should be noted that a model all of whose parameters are statistically significant can be from a poorly fitting model. Additionally, models with nonsensical results (e.g., paths that are clearly the wrong sign) and models with poor discriminant validity or Heywood cases can be '*good-fitting*' models. Therefore, we accept a weak model in CFA measurement.

The purpose of CFA was to confirm the structures of management models identified in EFA and to establish the validity of the scale. CFA was used to confirm the identified factor model by showing whether the model does or does not fit the observed data (Netemeyer et al., 2003). Therefore, this study uses confirmed relationships obtained in the EFA analysis and which are used in the CFA model for assessment and observed results of standardized residuals with an absolute

value greater than 3.00 (Jöreskog and Sörbom, 1993) that are usually alarming as potential threats to unidimensionality. Therefore, we took into account that large residuals related to specified items in the CFA are indicators of a model's inability to sufficiently explain the relationships in the model (Hair et al., 2010). Standardized residuals for these items above the critical limit suggest that they should be removed from the final model. Having deleted problematic items, the CFA measurement model would be re-specified and then re-estimated, leaving us with final validated models presented. This research, we also closely assess the management model through model fit indices. Especially to RMSEA, MacCallum, Browne, and Sugawara (1996) have used 0.01, 0.05, and 0.08 to indicate Excellent, Good, and Mediocre fit, respectively. Nonetheless, others have suggested 0.10 as the cutoff for poor fitting models. These are definitions for the population. That is, a given model may have a population value of 0.05, but in the sample, it might be greater than 0.10. Use of confidence intervals and tests of PCLOSE can help understand the sampling error in the RMSEA. There is greater sampling error for a small degree of freedom and small sample size models, in particular for the former. Thus, models with small DF (degree of freedom) and low N (number of samples) can have artificially large values of the RMSEA.

6.5.2 CFA of strategic management model fit assessment

Due to low standardized regression weights for SM17 <--- SM1F .375, model fit measures present unacceptable indices (NFI = 0.843, CFI = 0.885, SRMS = 0.104, RMSEA = 0.097, and PClose < 0.05). For that reason, SM17 (The chief executive determines our strategic direction) was removed from this CFA assessment. The other low standardized path coefficient is item SM9 (There are beliefs and assumptions about the way to do things which are specific to this organization). However, since SM9 and SM18 are the only two items in SM4F (forming the construct of Institutional Pressure), if dropped SM9 now means this study also needs to drop SM4F factor as a whole, which is an important factor based on the theory. The consequence is we are not able to test its relationships with other new identified factors for the U.N. context. Considering this study accepts a relative weak model for the final integration and mediation tests. Whether this study needs to drop this factor or not that will be depending on the assessment results in the path analysis (see Figure 14).

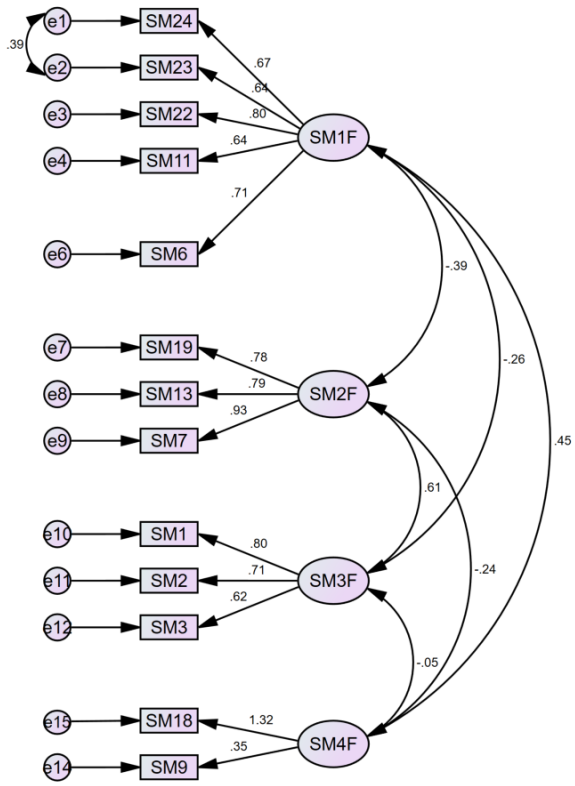


Figure 14: CFA for Strategic Management Model

SM Measure Fit Type	Indices for Model Fit	Current Model	Interpretation
Incremental fit measure	NFI (Bentler-Bonett Normed Fit Index)	0.829	Acceptable
	CFI (Comparative Fit Index)	0.905	Acceptable
Absolute measure of fit	RMSEA (Root Mean Square Error of Approximation)	0.095	Unacceptable
	SRMR	0.085	Acceptable
The Chi-square test	CMIN/DF	1.964	Acceptable

Table 40: SM Model Fit Indices

The results from this CFA assessment present all indices showed acceptable levels except RMSEA = 0.095, it does not meet the acceptable threshold (< 0.08) for the model fit that is the limit of a poor fit, but it is compensated by a Standardized RMR value of 0.085 suggesting an acceptable fit (Table 40). This study's ultimate goal is not to assess any single management model

but rather seeks to establish and propose an UNIMM. Therefore, this study continues to evaluate the whole model, integration and mediation effects of three management models to determine whether we should remove SM9 or not. By checking the standardized residuals, all absolute values are less than 3.00. The highest absolute value is 2.64, while majority values are between +1.50 and -1.50.

6.5.3 CFA of results-based management model fit assessment

CFA analysis results of the RBM data revealed that all indices meet the acceptable level of the model fit. Standardized Residual Covariances (SRCs) are much like modification indices. Significant residual covariances significantly decrease the model fit. However, they also indicate whether those discrepancies are significant. In this model, all SRCs are less than 3.00 threshold. The highest absolute value is 1.965 between RBM30 and RBM11, mean this model is acceptable.

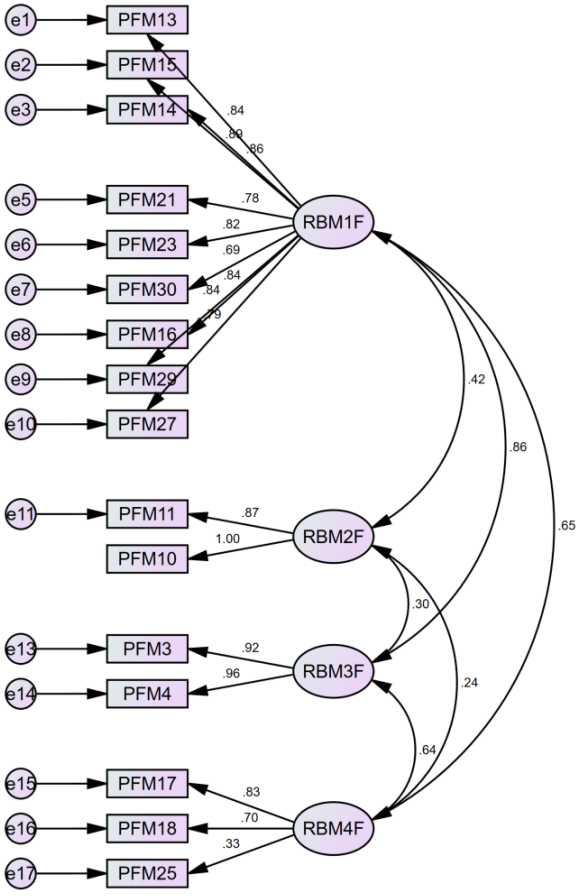


Figure 15: CFA for Results-based Management Model

RBM Measure Fit Type	Indices for Model Fit	Current Model	Interpretation
Incremental fit measure	NFI (Bentler-Bonett Normed Fit Index)	0.920	Acceptable
	CFI (Comparative Fit Index)	0.968	Acceptable
Absolute measure of fit	RMSEA (Root Mean Square Error of Approximation)	0.074	Acceptable
	SRMR	0.047	Acceptable
The Chi-square test	CMIN/DF	1.593	Acceptable

Table 41: RBM Model Fit Indices

The CFA assessment results from the results-based maanagement model present all indices (NFI = 0.920, CFI = 0.968, SRMS = 0.047, RMSEA = 0.074, and PClose < 0.05) showed all indices meet acceptable level for the model fit (se Table 41 and Figure 15). Therefore, this study continues on assessing the UNIMM.

6.5.4 CFA of project management model fit assessment

In view of low Standardized Regression Weights on PM2_6 from PM4F and relatively high standardized residual, model fit measures present unacceptable indices (NFI = 0.816, CFI = 0.883, SRMS = 0.084, RMSEA = 0.114, and PClose < 0.05). Therefore, PM2_6 (Project mission being in line with organization's strategic objectives) was dropped from this CFA assessment (see Table 42).

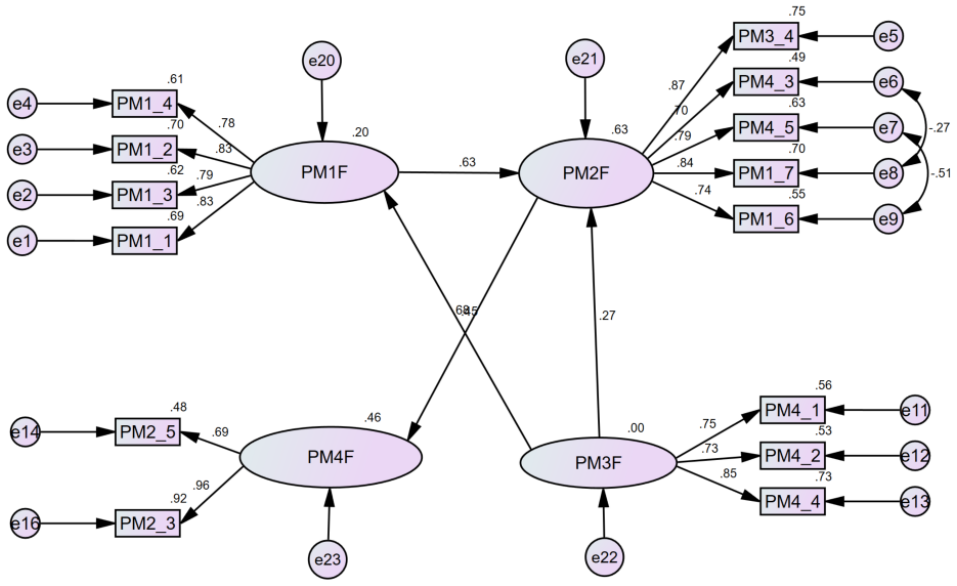


Figure 16: CFA for Project Management Model

PM Measure Fit Type	Indices for Model Fit	Current Model	Interpretation
Incremental fit measure	NFI (Bentler-Bonett Normed Fit Index)	0.850	Acceptable
	CFI (Comparative Fit Index)	0.912	Acceptable
Absolute measure of fit	RMSEA (Root Mean Square Error of Approximation)	0.103	Unacceptable
	SRMR	0.078	Acceptable
The Chi-square test	CMIN/DF	2.143	Acceptable

Table 42: PM Model Fit Indices

The results showed while all other indices showed acceptable level, RMSEA = 0.103, does not meet the acceptable threshold (< 0.08) for the model fit, which is the limit of a poor fit, but it is compensated by a Standardized RMR value of 0.078 suggesting an acceptable fit. SRCs are much like modification indices that point out where the discrepancies are between the proposed and estimated models. However, they also indicate whether those discrepancies are significant. In this model, all SRCs are less than 3.00 threshold. The highest absolute value is 2.248 for PM4_1 and PM1_6 means this model is acceptable.

6.5.5 Construct reliability of management models

All the parameter estimates were statistically significant at a level of 0.05 or better. Furthermore, all latent variables in both samples achieved an acceptable level of CR (> 0.6). All scales in the samples obtained an AVE value above the 0.5 thresholds, while the three scales in the sample had an AVE value less than the 0.5 thresholds (SM1F = 0.46, PM4F = 0.48 and RBM4F = 0.34). For the sake of this study, we accept weak validity for those constructs acknowledging that conclusions will be limited to some extent due to the low AVE values. Nevertheless, statistical evidence suggests that the three subscales, i.e. SM1F, RBM4F, and PM4F although poor, are still appropriate to achieve unidimensionality and convergent validity. Therefore, the scales are seen as suitable for further relationships testing (Table 43).

	Factors	AVE > .5	CR > .6	Alpha > .6	Mean	SD
Strategic Management	SM1F	0.46	0.83	0.83	3.36	1.44
	SM2F	0.66	0.85	0.88	3.49	0.82
	SM3F	0.5	0.74	0.75	2.46	0.62
	SM4F	0.55	0.7	0.63	2.54	0.39
Results-based Management (Performance Management)	RBM1F	0.56	0.92	0.95	3.85	1.63
	RBM2F	0.8	0.89	0.93	2.73	1.12
	RBM3F	0.76	0.86	0.94	4.12	1.77
	RBM4F	0.34	0.6	0.66	3.46	1.41
Project Management	PM1F	0.62	0.87	0.88	1.66	0.86
	PM2F	0.51	0.86	0.89	1.59	0.75
	PM3F	0.52	0.76	0.82	2.05	0.89
	PM4F	0.48	0.71	0.75	1.67	0.8

Table 43: Construct Reliability Assessment of the UNIMM

6.5.6 Discriminant validity of the constructs

The discriminant validity was assessed for all constructs together, with the aim of proving that each construct is distinct, capturing a phenomenon that other constructs do not (Fornell and Larcker, 1981). In Table 44, correlation coefficients for the samples are reported below the

diagonal. In addition, the squared correlations (or shared variances) between the constructs are reported above the diagonal. AVE values are reported on the diagonal and marked in red.

	PM1F	PM2F	PM3F	PM4F	SM1F	SM2F	SM3F	SM4F	RBM1F	RBM2F	RBM3F	RBM4F
PM1F	0.62	0.62	0.26	0.51	0.03	0.00	0.06	0.06	0.01	0.01	0.02	0.00
PM2F	0.78	0.51	0.42	0.55	0.08	0.01	0.03	0.06	0.02	0.00	0.04	0.00
PM3F	0.51	0.65	0.52	0.49	0.06	0.01	0.00	0.02	0.03	0.09	0.01	0.04
PM4F	0.71	0.74	0.70	0.48	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.00
SM1F	0.18	0.28	0.25	0.06	0.46	0.18	0.04	0.34	0.08	0.01	0.05	0.01
SM2F	0.02	-0.10	0.11	0.06	-0.42	0.66	0.48	0.09	0.61	0.13	0.46	0.30
SM3F	0.24	0.17	0.01	0.06	-0.21	0.69	0.50	0.00	0.20	0.07	0.13	0.19
SM4F	0.25	0.24	0.14	0.07	0.58	-0.29	-0.01	0.55	0.07	0.00	0.10	0.07
RBM1F	-0.08	-0.13	0.18	0.09	-0.29	0.78	0.45	-0.27	0.56	0.18	0.78	0.54
RBM2F	0.08	0.06	0.30	0.15	-0.11	0.36	0.26	0.04	0.43	0.80	0.10	0.07
RBM3F	-0.13	-0.20	0.11	0.01	-0.22	0.68	0.36	-0.32	0.88	0.31	0.76	0.53
RBM4F	0.02	-0.02	0.20	0.03	-0.08	0.55	0.44	-0.26	0.73	0.27	0.73	0.34

Table 44: Correlation Table of the UNIMM

First, as can be seen in Table 44, none of the 95% confidence intervals of the individual elements of the latent factor correlation matrix contained a value of 1.0 (Anderson and Gerbing, 1988). There are some large inter-construct correlations (> 0.7), for example between PM2F and PM1F (r = 0.79). However, these results are not surprising since in some studies both constructs measured the same underlying construct. If we bear in mind the conceptual definitions of these constructs, it can be argued that these constructs share a lot in common. This issue was also acknowledged by Reidenbach and Robin (1988 and 1990). When discussing all other constructs, their inter-construct correlations were not significant above 0.70 (Ping, 2004).

6.6 Structural Equation Modeling (SEM) for Path Analysis: Management Model Independently

SEM is chosen because of its ability to examine an integrated research model and not only the relationships between separate variables. Also, SEM is becoming even more appropriate because contemporary research scenarios and theories are becoming progressively complex and the numbers of variables included in the models are growing, while at the same time interconnections are becoming increasingly important. The goal of SEM is to combine path and

factor analytic models to determine the extent to which the research model is supported by sample data (Schumacker and Lomax, 2010).

6.6.1 Major SEM assumptions test

Hair et al. (2009) suggest that a significant violation of SEM assumptions, i.e. normality, continuity, linearity, homoscedasticity and independence of observation may harm the conclusion and findings drawn from it. Data analysis in SEM assumes that homoscedasticity is achieved. Homoscedasticity implies that 'dependent variables exhibit an equal level of variance across the range of predictor variables' (Hair et al., 2010). If dispersions are unequal across values of the independent variable, the relationship is said to be heteroscedastic. However, this study will not test homoscedasticity which is still being debated in research and because it is outside the scope of our analysis. The skewness of a normal distribution is zero (Hair et al., 2010), meaning that symmetric data should have a skewness near zero. Negative values for the skewness indicate data that are skewed left and positive values for the skewness indicate that data are skewed right. In this study, the largest skewness was found in PM1F, PM2F, PM3F and PM4F, which are skewed to the right. The normal distribution also has a kurtosis of zero. In our case, PM1F, PM2F, PM3F and PM4F in the PM sample have the largest positive kurtosis, which indicates a 'peaked' distribution. A negative kurtosis indicates a '*flat*' distribution, e.g. RBM1F, RBM3F, and RBM4F in Results-based management sample. Overall, based on the results of the normality test, this study could argue that no significant discrepancies from normal data were observed.

It should also be noted that structural equation models, especially ML estimations, are relatively robust about modest departures from a normal distribution (Diamantopoulos and Siguaw, 2000). Since Likert scales were used in the survey, it is reasonable to accept that a continuous variable underlies each measurement scale. Most of the relationships in SEM are tested through linear relationships. Therefore, linearity assumption regarding variables used in this study is reasonable because there is no evidence to suggest otherwise.

6.6.2 Path analysis

Assessment of the relationships is conducted in two stages. The first stage involves path analysis within each model while the second investigates relationships across the models.

Subsequently, mediation effects among the final model are investigated. SEM path analysis outcomes, executed on the three models independently.

Strategic management model is based on the United Nations Jointed Inspection Unit Report (2012) findings on strategic planning in the United Nations systems items 45 of Recommendation 1: During the interviews with the representatives of the secretariats, the Inspector was informed that an informal system-wide network on strategic planning (United Nations Strategic Planning Network (UNSPN)) has been active since 2008, sharing information and experiences among practitioners. UNSPN has so far agreed to the following use and purpose of strategic planning. Strategic planning can be applied at three levels to implement a vision in an organization: (a) Within the organization, in terms of internal communication; (b) For senior management and external donors (member-states), in order to set the right mindset; and (c) With peers. From that official U.N. working paper, a four relationships model is proposed for further assessment. Regarding results-based management and project management, since there was no such path analysis being explored in literature in the U.N. context before. Therefore, this study is simulating possible relationships and rationale on acceptable ones. Accordingly, three and four relationships were found in RBM and PM models, respectively.

Management Model	Related constructs	Relationship	Dataset
Strategic Management	Political Pressure (SM1F) and Strategic Planning (SM3F)	SM-H1	SM
	Political Pressure (SM1F) and Institutional Pressure (SM4F)	SM-H2	
	Strategic Planning (SM3F) and Strategic Development (SM2F)	SM-H3	
	Institutional Pressure (SM4F) and Strategic Development (SM2F)	SM-H4	
Results-based Management	Capability (RBM3F) and Program Focus (RBM2F)	RBM-H1	RBM
	Program Focus (RBM2F) and Effective Performance Management (RBM1F)	RBM-H2	
	Effective Performance (RBM1F) Management and Accountability (RBM4F)	RBM-H3	
Project Management	Project Manager Competency (PM1F) and Organizational Environmental (PM2F)	PM-H1	PM

	Project Responsibility (PM3F) and Organizational Environment (PM2F)	PM-H2	
	Organizational Environment (PM2F) and Project Efficiency (PM4F)	PM-H3	
	Accountability (PM3F) and Project Manager Competency (PM1F)	PM-H4	

Table 45: The Management Models and Relationships

The structural relationships in the UNIMM were found to relate as indicated in Table 45. Tables 46, 47, and 48, present the survey item codes, factor loadings and the questions associated with the Figures.

Factor Name	Factor	Item Code	Loading	Survey Question
Political Pressure	SM1F	SM6	0.541	Our business environment severely restricts our freedom of strategic choice
		SM17	0.547	The chief executive determines our strategic direction
		SM22	0.606	Our strategies often have to be changed because certain groups block their implementation
		SM11	0.558	Our strategy is closely associated with a particular individual
		SM23	0.840	Our chief executive tends to impose strategic decisions (rather than consulting the top management team)
		SM24	0.869	Many of the strategic changes which have taken place forced on us by those outside this organization
Strategic Development	SM2F	SM7	0.789	I have precise procedures for achieving strategic objectives
		SM13	0.825	Our strategy is made explicit in the form of precise plans
		SM19	0.827	I make strategic decisions based on a systematic analysis of our business environment
Strategic Planning	SM3F	SM1	0.924	I have definite and precise strategic objectives
		SM2	0.608	To keep in line with our business environment, we make continual small-scale changes to strategy
		SM3	0.539	Our organization's history directs our search for solutions to strategic issues
Institutional Pressure	SM4F	SM9	0.633	There are beliefs and assumptions about the way to do things which are specific to this organization

		SM18	0.833	Barriers exist in our business environment which significantly restricts the strategies we can follow

Table 46: Strategic Management CFA Constructs

The new findings are aiding in the understanding of the essential effects of strategic planning and strategic development in the U.N. context. According to the results, we can analyze the factors as following:

1. Political Pressure (SM1F): The data were mainly from Command, Enforced Choice, and Political factors of Bailey (2000) theory due to such influence may relate to the power of a small group of individuals at the top of the organization. The finding also indicated U.N. organizations are political arenas in which decision-making and strategy development interrelate with power. Finally, factors in the environment encourage the adoption of organizational structures and activities which best fit that environment. These external constraints may take the form of regulative coercion, competitive or economic pressures or normative pressures as to what constitutes legitimate Organizational action. These pressures limit the role organizational members playing in the choice tend to be common to organizations within U.N. sector with changes coming about through variations in organizations' processes and systems which may occur unintentionally or through imperfect imitation of successful structures, systems or processes.
2. Strategic Development (SM2F): The identified items have associated the process in the strategic development of strategic management regarding procedure, plan and systematic analysis. There is an assumption here that U.N. executives develop strategy and implemented by those below.
3. Strategic Planning (SM3F): Strategic choice takes place through *'successive limited comparisons*.' Strategic vision, goals, and objectives of the organization are not likely to be precise but general in nature in the strategic planning process. Especially in U.N. organizations, the uncertainty of the environment is commonly accepted, and as such managers are not able to know how it will change being in line with political climate change, rather middle-level managers attempt to be sensitive to it through constant environment scanning and programme priority evaluation. Commitment to a strategic option may be tentative and subject to review in the early stages of strategic planning. Cultural factor also

plays a major role in this new finding. The strategy is influenced by taken-for-granted frames of reference shared amongst U.N. staff. These frames of reference are underpinned by routines, rituals, stories and other symbolic artifacts which represent and reinforce the organizational culture. These cultural artifacts embed frames of reference in organizational activities and provide a repertoire for action, but are in turn likely to be resistant to change.

4. Institutional Pressure (SM4F): This new factor includes two distinguishing factors from the original theory constructs, namely Cultural and Enforce Choice that represents well for the (internal) Institutional Pressures U.N. organizations face including organizational beliefs, managerial assumptions, and bureaucratic barriers.

Factor Name	Factor Variable	Item Code	Loading	Survey Question
Effective Performance Management	RBM1F	RBM13	0.970	My organization has an effective outcome monitoring tool.
		RBM14	0.944	My organization has more than one monitoring tool in use at different management levels, such as HQ, regional offices, and country offices.
		RBM15	0.965	Monitoring and reporting are well harmonized with other development partners and make use of region/state/field office reporting systems.
		RBM16	0.592	Stakeholders and managers collectively analyze performance and decide on action.
		RBM21	0.723	There are an effective follow-up and actions taken on management response to performance evaluations.
		RBM22	0.763	Roles and responsibilities at all levels in my organization are clearly set out and known to staff.
		RBM23	0.652	My organization is demonstrating a proven ability to raise resources and in delivery.
		RBM27	0.522	I can easily find guidelines and support from my supervisors to help design objectives and indicators for projects and programmes.
		RBM29	0.523	In our office, adequate time and structured occasions are made available to learn from results and evaluations.

		RBM30	0.615	My organization's rewards systems provide real incentives for strengthening a results culture within the organization.
Program Focus	RBM2F	RBM10	0.853	I can confidently explain to my colleagues and development partners the difference between an output and an outcome.
		RBM11	0.931	I can explain clearly how outputs contribute to programme outcomes.
Capacity	RBM3F	RBM3	0.928	Adequate trained resources are available for operating the program performance management system.
		RBM4	0.811	Adequate staff time allocated for operating the results-based management system.
Accountability	RBM4F	RBM17	0.637	Business managers have the latitude, flexibility, and authority to arrange resources (financial and personnel) as required to achieve the desired outcomes.
		RBM18	0.585	There is a clear link between the allocation of required resources and mandated programme and evidence of results in my office programme.
		RBM25	0.511	Department head can only be held accountable for the delivery of organization's outputs.

Table 47: Results-Based Management CFA Constructs

The research model of results-based management is based on current empirical approach U.N. has adopted at the regional and country levels of the programme. This model is comprised of six distinct dimensions, interact with strategic management factors, i.e. strategic planning, development, and implementation. The new factors show the following:

1. Effective Performance Management (RBM1F): items from Monitoring and Report dimension mainly load on this new factor to gauge where programmes stand regarding international norms and standards. It helps understand where programmes are in relationship to results planned, to track progress (by expected results and agreed indicators), and to identify issues and analyze relevant information and reports that become available as implementation occurs. The problem of how to measure the outputs and the outcomes of U.N. programmes is often considered to be a major challenge when developing

performance information systems. Performance data will not be used unless the 'right' data and information are collected. Further, many have found, not unexpectedly, that some types of U.N. programmes and mission services are more amenable to measurement than others. That is especially true when outcomes are being reported on since there is often uncertainty surrounding the measurement of the outcomes and the extent to which the outcomes are linked to the programme in question. Items from Support System are also only landed on this new factor show how a performance information system is implemented in a U.N. organization is critical to its success. Combining other items from the Adjustment and Accountability dimensions, is evidence that this new factor is more emphasis on ensuring performance efficiency and seeking to facilitate system-wide collaboration on the measurement and assessment of performance within the United Nations. They provide a reference for strengthening, professionalizing and improving the quality of evaluation in all bodies of the United Nations system.

2. Program Focus (RBM2F): Only items from Program Focus were loaded on this factor. It explains while the planning phase United Nations agencies serve to prepare a programme management framework, more attention needs to be placed on managing and monitoring programme outcome results. Flow and consistency of results should be maintained among the various programming instruments, the agency operational plans down to annual work plans. Effectively utilizing RBM, therefore, requires a proper management structure in line with programme focus.
3. Capacity (RBM3F): Only items from Culture and Leadership were landed on this factor. Almost all discussions of building performance systems stress the importance of adequate trained and sufficient resources (including budget, time, people and knowledge) could allow operation managers to carry out their core functions.
4. Accountability (RBM4F): Items from Dynamic Adjustment, Learning, Accountability and Evaluation from the original UNDP (2007) constructs were mainly loaded on this new factor. In common, the concerns are accentuating on business managers should have the latitude, flexibility, and authority to arrange resources (financial and personnel) as required to achieve the desired outcomes. Therefore, there should establish a clear responsibility link between the allocation of required resources and mandated programme and evidence of

results in my office programme. Department head, the responsible person, can hold responsible for the delivery of organization's outputs.

Factor Name	Factor Variable	Item Code	Loading	Survey Question
Project Manager Competency	PM1F	PM1_1	0.869	To communicate at multiple levels
		PM1_2	0.824	To deal with ambiguity
		PM1_3	0.846	To coordinate team works and opinions
		PM1_4	0.587	With effective leadership
Organizational Environment	PM2F	PM3_4	0.882	Commitment to the project success
		PM4_3	0.722	Top management support
		PM4_5	0.694	Functional/operational manager support
		PM1_7	0.672	With right competence in project management
		PM1_6	0.659	With self-commitment to the project success
		PM4_6	0.650	Client acceptance
Project Responsibility (Governance)	PM3F	PM4_1	0.779	Effective project executive board
		PM4_2	0.694	Clear staff job description and responsibilities
		PM4_4	0.685	Project governing body structure
Project Efficiency (Implementation)	PM4F	PM2_3	0.512	Adequate funds/resources
		PM2_5	0.941	Clear goals/objectives
		PM2_6	0.528	Project mission being in line with organization's strategic objectives

Table 48: Project Management CFA Constructs

The results from project management model examine the factors and relationships of project management in the U.N. organizations, presently engaged in the process of integration of the project management approach to enhance the levels of project success. The results from this study support previous studies that the items from Project Management's Competency, Organization and Environment, and Effectiveness of Project Management are well loaded on PM1F, PM3F, and PM4F components, respectively, as presented. After examining the items in PM3F, we can conclude this factor is grouped based on the characteristics of project governing structure as well as its responsibilities. In contrast to PM2F, it has all items associated with project management environment in U.N. context, is more related to environmental context. This study

concluded the final model with factors of Project Manager's Competency (PM1F), Project Environment (PM2F), Project Responsibility (PM3F), and Project Efficiency (PM4), respectively.

Using AMOS, the path characteristic results obtained are presented in table 49 that shows the relationship, the path coefficient, standard error (SE) and whether the relationship is considered significant or not. P-value with symbol *** stands for significant, the value is less than 0.001. C.R. stands for Critical ratio. The critical ratio is the parameter estimate divided by an estimate of its standard error.

Relationship			Standardized Path Coefficient	S.E.	C.R.	P value	Result
Strategic Management …							
SM3F	<---	SM1F	-0.211	0.08	-2.237	0.025	Not Significant
SM4F	<---	SM1F	0.579	0.099	7.351	***	Significant
SM2F	<---	SM3F	0.677	0.107	10.783	***	Significant
SM2F	<---	SM4F	-0.283	0.072	-4.516	***	Significant
Results-Based Management …							
RBM2F	<---	RBM3F	0.313	0.064	3.405	***	Significant
RBM1F	<---	RBM2F	0.427	1.09	4.886	***	Significant
RBM1F	<---	RBM4F	0.631	0.126	4.056	***	Significant
Project Management …							
PM1F	<---	PM3F	0.507	0.094	6.086	***	Significant
PM2F	<---	PM1F	0.571	0.044	10.62	***	Significant
PM2F	<---	PM3F	0.391	0.047	7.575	***	Significant
PM4F	<---	PM2F	0.963	0.072	11.771	***	Significant

Table 49: Regression Weights of Relationships in Three Management Research Model Independently

1. The relationship between SM3 (Strategic Planning) and SM1F (Strategic Development): The probability of getting a critical ratio as large as 2.237 in absolute value is .025. In other words, the regression weight for SM1F in the prediction of SM3F is significantly different from zero at the 0.05 level (two-tailed). Based on various U.N. reports, political horse-trading effect is commonly existing in U.N. context. From the model, it represents the relationship between the Political Pressure and the Strategic Planning. The purpose of

assessing this relationship to find out what extent the influence is in the model. In this independent test, the results showed political pressure does not have a significant effect on U.N. strategic planning process. However, the goal of this study is to find out the overall effect while all management models and factors being integrated. Therefore, any interpretation based on individual management model without considering other influential factors could lead to a bias conclusion.

2. The relationship between SM4F (Institutional pressure) and SM1F (Political Pressure): The probability of getting a critical ratio as large as 7.351 in absolute value is less than 0.001. In other words, the regression weight for SM1F in the prediction of SM4F is significantly different from zero at the 0.001 level (two-tailed). Based on various U.N. reports and observations from member-states, political and power influence play a major role in U.N. strategic management process that includes also influence strategic decision making and U.N. culture. The relationship is to test how significant the effect is. From the results of this independent model, it shows the relationship does significantly exist in the U.N. context.
3. The relationship between SM2F (Strategic Development) and SM3F (Strategic Planning): The probability of getting a critical ratio as large as 10.783 in absolute value is less than 0.001. In other words, the regression weight for SM3F in the prediction of SM2F is significantly different from zero at the 0.001 level (two-tailed). In literature, it is commonly agreed that strategic management comprises three management components, namely, strategic planning, strategic development, and strategic implementation. The assessment of this relationship is to confirm the significant effect between strategic planning and strategic development does exist in the management model. The results from this independent model confirm the Strategic Planning (SM3F) factor has a significant influence on Strategic Development (SM2F).
4. The relationship between SM2F (Strategic Planning) and SM4F (Institutional Pressure): The probability of getting a critical ratio as large as 4.516 in absolute value is less than 0.001. In other words, the regression weight for SM4F in the prediction of SM2F is significantly different from zero at the 0.001 level (two-tailed). Environment factors including institutional barriers, beliefs, and assumptions play a major role in the establishment of strategic procedures and its development process. The relationship is to

examine the effect of these two factors. The results from this independent model show the relationship is significant.

5. The relationship between RBM2 (Program Focus) and RBM3 (Capacity): The probability of getting a critical ratio as large as 3.405 in absolute value is less than 0.001. In other words, the regression weight for RBM3F in the prediction of RBM2F is significantly different from zero at the 0.001 level (two-tailed). From the data simulation, this study found a strong relationship between Capacity and Program Focus factors that are consistency with the theory and U.N. practice today in the establishment of knowledge management and continuous learning and training program to ensure program delivery in an efficient and effective way to the member-states.
6. The relationship between RBM1 (Performance Efficiency) and RBM2 (Program Focus): critical ratio as large as 4.886 in absolute value is less than 0.001. In other words, the regression weight for RBM2F in the prediction of RBM1F is significantly different from zero at the 0.001 level (two-tailed). The important relationship shows with program management and continuous evaluation will enhance overall program performance as a whole.
7. The relationship between RBM1 (Performance Efficiency) and RBM4 (Accountability): critical ratio as large as 4.056 in absolute value is less than 0.001. In other words, the regression weight for RBM4F in the prediction of RBM1F is significantly different from zero at the 0.001 level (two-tailed). In literature and U.N. practice, a clear accountability structure and responsibilities will substantially increase the corporate performance as a whole. This result supports current accountability structure project being implemented in U.N. organizations.
8. The relationship between PM1F (Project Manager's Competency) and PM3F (Project Responsibility): The probability of getting a critical ratio as large as 6.086 in absolute value is less than 0.001. In other words, the regression weight for PM3F in the prediction of PM1F is significantly different from zero at the 0.001 level (two-tailed). From various theories and project methodologies, clear project responsibility and governing body will enable project manager's role. In current U.N. practice using the PRINCE2® methodology, a project initialization document is requested before a project being formalized. One of the

requirements in that document is clear responsibilities of project manager's role and authority. This finding supports current U.N. practice.

9. The relationship between PM2F (Organizational Environment) and PM1F (Project Manager's Competency): The probability of getting a critical ratio as large as 10.62 in absolute value is less than 0.001. In other words, the regression weight for PM1F in the prediction of PM2F is significantly different from zero at the 0.001 level (two-tailed). From various theories, project manager's capability is one of most critical success factor to a project success. This study once again confirmed this factor also a critical management component in the U.N. context.
10. The relationship between PM2F (Organizational Environment) and PM3F (Project Responsibility): The probability of getting a critical ratio as large as 7.575 in absolute value is less than 0.001. In other words, the regression weight for PM3F in the prediction of PM2F is significantly different from zero at the 0.001 level (two-tailed). It is commonly agreed that clear project role and governing body will enhance the efficiency of overall project environment regarding top management support and overall management maturity in project management practices in U.N. organizations.
11. The relationship between PM4F (Project Efficiency) and PM2F (Organizational Environment): The probability of getting a critical ratio as large as 11.771 in absolute value is less than 0.001. In other words, the regression weight for PM2F in the prediction of PM4F is significantly different from zero at the 0.001 level (two-tailed). In literature, the organizational environment is always playing an important role in a success of project implementation that viewpoint is also confirmed in the U.N. context in this study.

All relationship path weights (coefficient) are significant with the exception of SM1F and SM3F which was not supported (P=0.025). As a result, the model fit indices are further scrutinized, as shown in Table 50.

Measure Fit	Indices for Model Fit	Current Model	Interpretation
Strategic Management Model			
Incremental fit measure	NFI (Bentler-Bonett Normed Fit Index)	0.951	Acceptable
	CFI (Comparative Fit Index)	0.963	Acceptable

Absolute measure of fit	*RMSEA (Root Mean Square Error of Approximation)*	*0.155*	*Unacceptable*
	SRMR	0.073	Acceptable
The Chi-square Test	CMIN/DF	3.568	Acceptable
Results-Based Management Model			
Incremental fit measure	NFI (Bentler-Bonett Normed Fit Index)	0.994	Acceptable
	CFI (Comparative Fit Index)	0.997	Acceptable
Absolute measure of fit	*RMSEA (Root Mean Square Error of Approximation)*	*0.083*	*Unacceptable*
	SRMR	0.028	Acceptable
The Chi-square Test	CMIN/DF	1.731	Acceptable
Project Management Model			
Incremental fit measure	NFI (Bentler-Bonett Normed Fit Index)	0.988	Acceptable
	CFI (Comparative Fit Index)	0.991	Acceptable
Absolute measure of fit	*RMSEA (Root Mean Square Error of Approximation)*	*0.152*	*Unacceptable*
	SRMR	0.027	Acceptable
The Chi-square Test	CMIN/DF	3.467	Acceptable

Table 50: Model Fit Indices of Management Research Models

The criterion of Chi-square test for acceptance varies across researchers, ranging from less than 2.00 (Ullman, 2001) to less than 5.00 (Schumacker and Lomax, 2004). The Chi-square ($\chi 2$) test of SM and PM, the ratio is over 3, but it is on the edge of the acceptable range (< 5.00). Except RMSEA exceeding an acceptable threshold, less than 0.08, all other fit indices showed that the model fit the data is acceptable. Standardized RMR is within the acceptable threshold that compensates RMSEA. However, as discussed earlier, this study accepts a weak model fit. Therefore, we assume that the research model fit is acceptable for now, suggesting that this model is suitable for further testing and model development. The paths were assessed through standardized estimates and associated p-values. Given that, all of the relationships in the model were one-directional, all critical p-values shown are significant except the relationship between SM1F and SM3F. The probability of getting a critical ratio as large as 2.237 in absolute value is 0.025. In other words, the regression weight for SM1F in the prediction of SM3F is significantly different from zero at the 0.05 level (two-tailed), while all others in absolute value are less than 0.001, which means significantly different from zero at the 0.001 level (two-tailed).

6.7 SEM for Path Analysis: UNIMM

6.7.1 Exploring relationships across management models

The ultimate goal of this study is the integration of three management models comprising twelve factors. At this point, further path analysis was performed across the management models and between the different factors with an attempt to identify any relationships among cross-model constructs. The potential relationships found are presented in Figure 17.

The imputed scores of the items measuring subjective constructs were used. In the variance analysis, the use of sum score to represent factors is appropriate or even preferred technique (DiStefano et al. 2009). The correlation of the aggregated factor scores of subjective measures is reported in the following Table 51 with an acceptable reliability (r = 0.744).

	PM1F	PM2F	PM3F	PM4F	SM4F	SM3F	SM2F	SM1F	RBM4F	RBM3F	RBM2F
PM2F	.782										
PM3F	.507	.647									
PM4F	.711	.739	.698								
SM4F	.253	.243	.138	.068							
SM3F	.245	.173	.014	.057	-.007						
SM2F	.021	-.104	.108	.065	-.295	.694					
SM1F	.179	.279	.246	.059	.579	-.211	-.424				
RBM4F	.020	-.017	.203	.034	-.258	.439	.552	-.079			
RBM3F	-.135	-.197	.107	.013	-.323	.364	.678	-.222	.731		
RBM2F	.076	.057	.300	.154	.040	.261	.358	-.114	.269	.313	
RBM1F	-.077	-.127	.185	.091	-.271	.446	.779	-.285	.734	.885	.427

Table 51: Inter-factor Correlation Matrix (Integrated View)

As shown in Figure 17, two relationships are identified: INT-H1 (SM2F-RBM1F) and INT-H2 (RBM1F-PM4F). The integration effect of the INT-H1 and INT-H2 relationships are tested below. In addition, other relationships are also examined: between Political Pressure (SM1F) and Strategic Development (SM2F), between Capacity (RBM3F) and Effective Performance Management (RBM1F), between Project Manager Competency (PM-1F) and Project Efficiency, and between Project Responsibility (PM3F) and Project Efficiency (PM4F). There are two main reasons to carry out this additional examination of relationships: (1) their relationships were

discussed in the literature elaborated in chapter 2, and (2) this study attempts to validate other researcher's observations and reports.

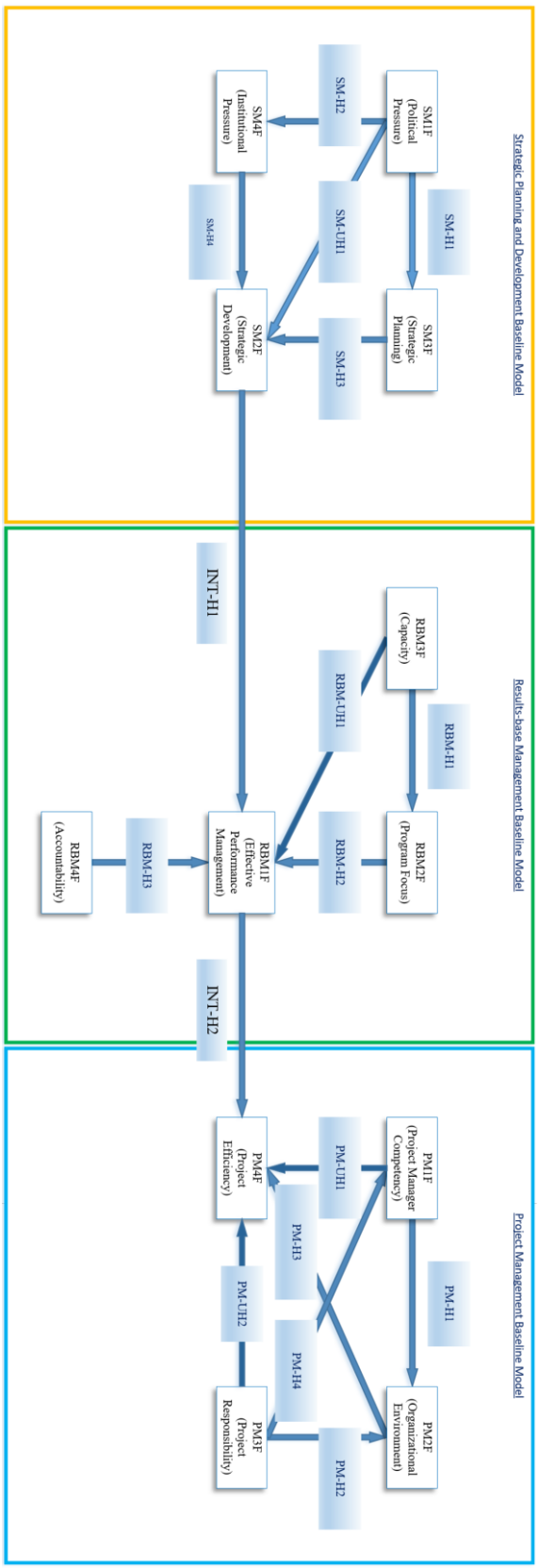


Figure 17: Relationships and UNIMM

UNIMM: (Standardized Path coefficients and P value)

	Regression Weights: (Group number 1 - Default model)							
	Relationships			Standardized Path Coefficient	S.E.	C.R.	P	Result
1	*SM3F*	*<---*	*SM1F*	*-0.206*	*0.065*	*-2.621*	*0.009*	*Not Significant*
2	SM4F	<---	SM1F	**0.574**	0.093	7.7	***	Supported
3	SM2F	<---	SM3F	**0.668**	0.092	12.82	***	Supported
4	*SM2F*	*<---*	*SM4F*	*-0.132*	*0.074*	*-2.107*	*0.035*	*Not Supported*
5	RBM2F	<---	RBM3F	0.336	0.063	3.729	***	Supported
6	*SM2F*	*<---*	*SM1F*	*-0.201*	*0.092*	*-3.201*	*0.001*	*Not Supported*
7	RBM1F	<---	SM2F	0.294	0.048	6.064	***	Supported
8	*RBM1F*	*<---*	*RBM2F*	*0.114*	*0.047*	*3.041*	*0.002*	*Not Supported*
9	RBM1F	<---	RBM3F	**0.55**	0.054	8.969	***	Supported
10	*RBM1F*	*<---*	*RBM4F*	*0.144*	*0.063*	*2.799*	*0.005*	*Not Supported*
11	*PM4F*	*<---*	*PM2F*	*0.274*	*0.088*	*2.948*	*0.003*	*Not Supported*
12	*PM4F*	*<---*	*RBM1F*	*0.107*	*0.023*	*1.899*	*0.058*	*Not Supported*
13	PM4F	<---	PM1F	0.353	0.06	4.507	***	Supported
14	PM4F	<---	PM3F	0.315	0.06	4.418	***	Supported
15	PM2F	<---	PM1F	**0.804**	0.058	11.206	***	Supported
16	*PM1F*	*<---*	*PM3F*	*-0.075*	*0.186*	*-0.444*	*0.657*	*Not Supported*
17	PM2F	<---	PM3F	**0.700**	0.083	9.541	***	Supported

Table 52: Path Analysis of the UNIMM

The results include all factors and relationships proposed in the UNIMM (see Table 52). Some important relationships are consistent in findings in independent management model in Chapter 6.6.2). For Example, the relationship between SM4F (Institutional Pressure) and SM1F (Political Pressure), between SM2F (Strategic Development) and SM3F (Strategic Planning), between PM2F (Organizational Environment) and PM1F (Project Manager's Competency), and between PM3F (Project Responsibility) and PM2F (Organizational Environment). The new relationship between RBM1F (Performance Efficiency) and RBM3F (Capacity) was not identified in independent RBM management model. Therefore, further examination is required to refine the UNIMM also to determine the integration effect among them.

The results show a good model fit (Chi-square = 44.856 with 31 degree of freedom, probability value for CMIN/DF = 1.447, GFI = 0.940, NFI = 0.953, CFI = 0.984, IFI = 0.985,

SRMR = 0.097, RMSEA =0.065, and 90% confidence interval of RMSEA is between 0.000 and 0.104 with PCLOSE = 0.266). These results are presented in Table 55. The highest standardized residual is 1.39, below the acceptable threshold 3.0. The significant results that support the integrated research model are shown in Figure 18 below. Note that PM3F construct was removed because after removing not significant relationships from the initial assessment of the UNIMM, there is no meaningful relationship found between PM3F and any other factors. Therefore, this study confirms PM3F (Project Responsibility) is not that significant as thought in the UNIMM. Accordingly, the factor was removed from the constructs of the UNIMM.

The final UNIMM was inspected by examining the fit indices. The results showed that the model fit the data very well (Chi-square = 36.104 with 24 degree of freedom, probability value for Chi-square = 0.54, CMIN/DF = 1.504, GFI = 0.945, NFI = 0.957, CFI = 0.984, IFI = 0.985, RMSEA =0.069, and 90% confidence interval of RMSEA is between 0.000 and 0.112 with PCLOSE = 0.237). All standardized residual (absolute) values are below acceptable threshold 3.0; the highest value is 2.88. The SRC table is presented in Table 53.

	SM1F	SM4F	RBM3F	SM3F	RBM2F	PM1F	SM2F	RBM1F	PM2F	RBM4F	PM4F
SM1F	-0.09										
SM4F	-0.098	0									
RBM3F	-0.302	0.17	-0.039								
SM3F	0.809	1.66	-0.393	-0.24							
RBM2F	-0.555	1.5	-0.016	1.355	-0.004						
PM1F	1.842	2.62	-1.389	-0.415	0.785	0					
SM2F	0.206	0.92	-0.165	-0.484	1.382	-1.663	-0.362				
RBM1F	-0.112	0.76	-0.068	-0.546	0.451	-1.384	-0.115	-0.03			
PM2F	**2.886**	2.54	-1.142	-0.691	0.876	0.09	-1.813	-0.938	0.113		
RBM4F	-0.277	0.36	-0.196	-0.245	-0.501	-0.282	-0.059	-0.277	0.141	-0.348	
PM4F	1.584	1.42	-0.926	-0.607	0.995	-0.377	-1.316	-0.752	-0.255	0.079	-0.451

Table 53: Standardized Residual Covariance of the Final UNIMM

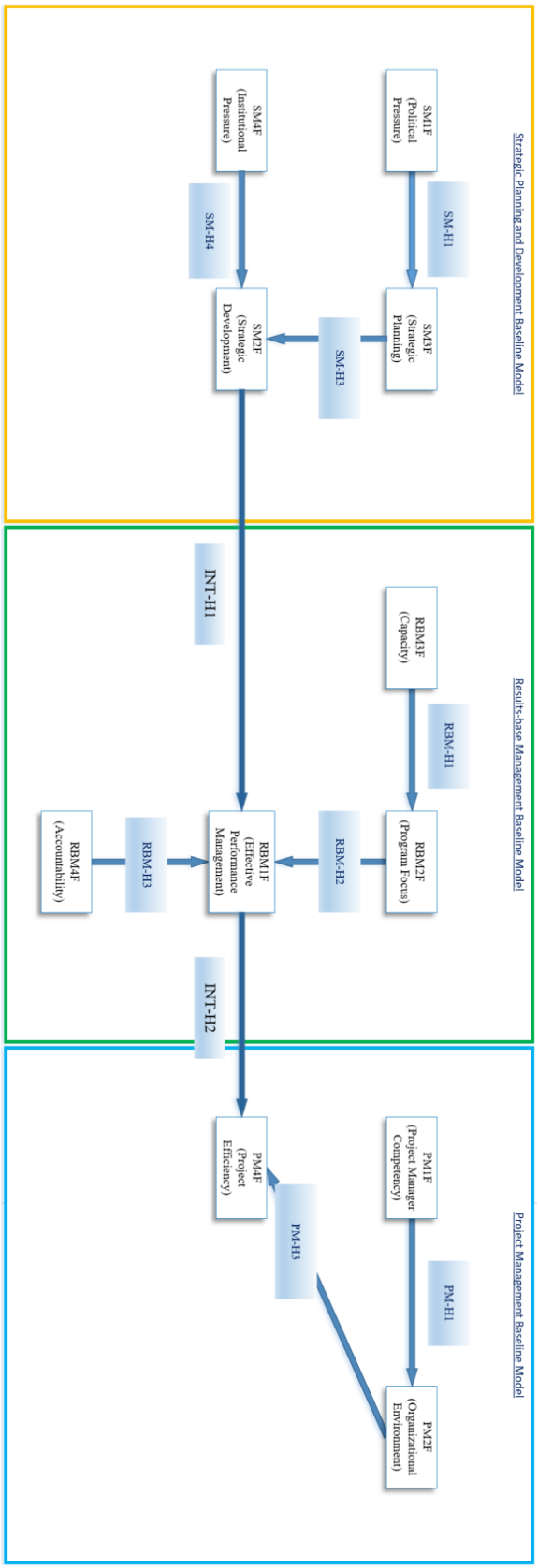


Figure 18: Final UNIMM

A final verification of the UNIMM after the removal of the PM3F was done using CFA. Results of path analysis in the final model are given in Table 54.

Relationships			Path Coefficient	S.E.	C.R.	P-Value	Result
SM3F	<---	SM1F	-.287	.073	-3.349	***	Supported
SM2F	<---	SM3F	.654	.104	10.572	***	Supported
SM2F	<---	SM4F	-.271	.067	-4.656	***	Supported
RBM2F	<---	RBM3F	.661	.046	12.706	***	Supported
RBM1F	<---	SM2F	.331	.052	6.291	***	Supported
PM2F	<---	PM1F	.787	.047	13.506	***	Supported
RBM1F	<---	RBM2F	.392	.070	4.141	***	Supported
PM4F	<---	PM2F	.918	.069	12.102	***	Supported
RBM1F	<---	RBM4F	.207	.059	11.673	***	Supported
PM4F	<---	RBM1F	.835	.025	3.391	***	Supported

Table 54: Path Analysis of final UNIMM

The results support the UNIMM. Significant paths follow from strategic management (SM) to project implementation (PM). All constructs of each management model have a significant effect including integration effects (INT-H1 and INT-H2): the construct of Strategic Development (SM2F) has a significant effect on the construct of Effective Performance Management (RBM1F), which has a significant effect on the construct of Project Efficiency (PM4F).

Model Fit Indices		
Chi-square	36.104	
DF	24	
P-value of Chi-square	0.54	Not Significant (model accepted)
CMIN/DF	1.504	Acceptable
GFI	0.945	Acceptable
NFI	0.957	Acceptable
RFI	0.901	Acceptable
IFI	0.985	Acceptable
RMR	0.096	Acceptable
TLI	0.964	Acceptable
CFI	0.984	Acceptable
RMSEA	0.069	Acceptable
PCLOSE	0.237	
90% of confidence interval of RMSEA	0.000~0.112	

Table 55: SEM UNIMM Fit Summary

The results show a good model fit (Chi-square = 36.104 with 24 degree of freedom, P-value = 1.504, GFI = 0.945, NFI = 0.957, CFI = 0.984, IFI = 0.985, RMR = 0.096, RMSEA =0.069, and 90% confidence interval of RMSEA is between 0.000 and 0.112 with PCLOSE = 0.237). These results are presented in Table 55. The highest standardized residual is 2.887, still below the acceptable threshold 3.0. The significant results support the integrated research model are shown in Figure 18.

6.7.2 Discussion of the UNIMM in U.N. context

Proposed Factor Name	Factor Variable	Variable	Theory Factors	Survey Question
Political Pressure (External)	SM1F	SM6	Enforced Choice	Our freedom of strategic choice is severely restricted by our business environment
		SM22	Political	Our strategies often have to be changed because certain groups block their implementation
		SM11	Command	Our strategy is closely associated with a particular individual
		SM23		Our chief executive tends to impose strategic decisions (rather than consulting the top management team)
		SM24		Many of the strategic changes which have taken place forced on us by those outside this organization
Strategic Development	SM2F	SM7	Planning	I have precise procedures for achieving strategic objectives
		SM13		Our strategy is made explicit in the form of precise plans
		SM19		I make strategic decisions based on a systematic analysis of our business environment
Strategic Planning	SM3F	SM1	Planning	I have definite and precise strategic objectives
		SM2	Incrementalism	To keep in line with our business environment, we make continual small-scale changes to strategy
		SM3	Cultural	Our organization's history directs our search for solutions to strategic issues
Institutional Pressure	SM4F	SM9	Cultural	There are beliefs and assumptions about the way to do things which are specific to this organization

(Internal)		SM18	Enforced Choice	Barriers exist in our business environment which significantly restricts the strategies we can follow
Performance Efficiency	RBM1F	RBM13	Monitoring and Reporting	My organization has an effective outcome monitoring tool.
		RBM14	Adjustment and Learning	My organization has more than one monitoring tool in use at different management levels, such as HQ, regional offices, and country offices.
		RBM15	Evaluation and Accountability	Monitoring and reporting are well harmonized with other development partners and make use of region/state/field office reporting systems.
		RBM16	Support Systems	Stakeholders and managers collectively analyze performance and decide on action.
		RBM21		There are an effective follow-up and actions taken on management response to performance evaluations.
		RBM22		Roles and responsibilities at all levels in my organization are clearly set out and known to staff.
		RBM23		My organization is demonstrating a proven ability to raise resources and in delivery.
		RBM27		I can easily find guidelines and support from my supervisors to help design objectives and indicators for projects and programmes.
		RBM29		In our office, adequate time and structured occasions are made available to learn from results and evaluations.
		RBM30		My organization's rewards systems provide real incentives for strengthening a results culture within the organization.

Program Focus	RBM2F	RBM10	Program Focus	I can confidently explain to my colleagues and development partners the difference between an output and an outcome.
		RBM11		I can explain clearly how outputs contribute to programme outcomes.
Capacity	RBM3F	RBM3	Culture and Leadership	Adequate trained resources are available for operating the program performance management system.
		RBM4		Adequate staff time allocated for operating the results-based management system.
Accountability	RBM4F	RBM17	Adjustment and Learning	Business managers have the latitude, flexibility, and authority to arrange resources (financial and personnel) as required to achieve the desired outcomes.
		RBM18	Evaluation and Accountability	There is a clear link between the allocation of required resources and mandated programme and evidence of results in my office programme.
		RBM25		Department head can only be held accountable for the delivery of organization's outputs.
Project Manager Competency	PM1F	PM1_1	Ability of Project Manager	To communicate at multiple levels
		PM1_2		To deal with ambiguity
		PM1_3		To coordinate team works and opinions
		PM1_4		With effective leadership
Organizational Environment	PM2F	PM3_4	Ability of Project Manager	Commitment to the project success
		PM4_3	Organization and Environment	Top management support
		PM4_5	Ability of Project team members	functional/operational manager support
		PM1_7		With right competence in project management

		PM1_6		With self-commitment to the project success
		PM4_6		Client acceptance
Project Responsibility (Governance)	PM3F	PM4_1	Organization and Environment	Effective project executive board
		PM4_2		Clear staff job description and responsibilities
		PM4_4		Project governing body structure
Project Efficiency (Implementation)	PM4F	PM2_3	Effectiveness of Project Management	Adequate funds/resources
		PM2_5		Clear goals/objectives

Table 56: The Relationships and Constructs of the UNIMM

1. Relationship of SM-H1 (Political Pressure negatively influences Strategic Planning): Based on the results of the assessment of the research model presented in Table 54, it is evident that relationship SM-H1 is confirmed, means (SM3F) Strategic Planning is negatively influenced by (SM1F) Political Pressure (standardized regression weight = -0.288; $p < 0.05$). The probability of getting a critical ratio as large as 3.357 in absolute value is less than 0.001. In other words, the regression weight for SM1F in the prediction of SM3F is significantly different from zero at the 0.001 level (two-tailed). These results also support the argument of challenges U.N. facing from the political influences, discussed in Chapter 4. The political horse-trading effect, as well as enforced choice, are strongly influencing the strategic planning process. Unfortunately, in this political interest-trading zone (see Figure 12), any effort to improve in management process will have little effect on overall performance or improvement from change.
2. Relationship of SM-H2 (Political Pressure positively influences Institutional Pressure): Even though it does not suggestively support this relationship in the final model, the relationship (SM-H2) was proven in the initial management model that indicates the political interest trading phenomenon do exist in U.N. organizations. While the efforts put management framework into a unified as well as integrated one, the political interest trading effect will be reduced. This study also examines whether there is a mediation effect among SM1F, SM4F and SM2F, found no such significant effect existed. Statistically speaking,

this study is focusing on the research in integration force in the U.N. Thus, this study could be further explored in the future study.

3. Relationship of SM-H3 (Strategic Planning positively influences Strategic Development): It is also well supported by our research model (standardized regression weight = 0.653; $p < 0.05$). The probability of getting a critical ratio as large as 10.567 in absolute value is less than 0.001. In other words, the regression weight for SM3F in the prediction of SM2F is significantly different from zero at the 0.001 level (two-tailed). Thus, evidently, a well developed strategic planning will achieve better strategic development performance. However, with the consideration of the influence of the Political Pressure, the negative indirect effect will reduce the overall performance in Strategic Development. This test supports the notion that SM3F is significant and an important predictor of SM2F. Taking the further test of a mediation effect found there is such effect existed among SM1F, SM2F, and SM3F. A discussion about mediation effect will be discussed in Phase Three.
4. Relationship of SM-H4 (Institutional Pressure negatively influences Strategic Development): It is supported statistically that the (internal) Institutional Pressure, such as culture (beliefs) and bureaucratic barriers, has significant as well as negative influence on the Strategic Development (standardized regression weight = -0.272; $p < 0.05$). The probability of getting a critical ratio as large as 4.68 in absolute value is less than 0.001. In other words, the regression weight for SM4F in the prediction of SM2F is significantly different from zero at the 0.001 level (two-tailed). Other than culture and bureaucracy, also, resistance and uncertainty from U.N. staff due to unclear of future state and lack of process transparency contribute this adverse impact on the strategic development. Other the other hand, improve on above-mentioned concerns will positively improve strategic formulation in U.N. organizations in return.
5. Relationship of RBM-H1 (Capacity positively influences Program Focus): Evidently, Capacity has a significant influence on accumulating Knowledge for continuous adjustment and improvement in performance process (standardized regression weight = 0.313; $p < 0.05$). The probability of getting a critical ratio as large as 3.414 in absolute value is less than 0.001. In other words, the regression weight for RBM3F in the prediction of RBM2F is significantly different from zero at the 0.001 level (two-tailed). Examination, whether

there is a mediation effect through RBM2F on RBM1F, found there is no such significant effect existed. This finding is consistent with that in the independent management model.

6. Relationship of RBM-H2 (Program Focus positively influences Performance Efficiency): Based on the results, the Knowledge and Adjustment factors has significant as well as positive impact on Effective Performance Management (standardized regression weight = 2.167; $p < 0.05$). The probability of getting a critical ratio as large as 3.477 in absolute value is less than 0.001. In other words, the regression weight for RBM2F in the prediction of RBM1F is significantly different from zero at the 0.001 level (two-tailed). This finding is consistent with that in the independent RBM management model.
7. Relationship of RBM-H3 (Accountability positively influences Performance Efficiency): Statistically, clear Accountability positively has a significant influence on overall Effective Performance Management (standardized regression weight = 0.826; $p < 0.05$). The probability of getting a critical ratio as large as 11.673 in absolute value is less than 0.001. In other words, the regression weight for RBM4F in the prediction of RBM1F is significantly different from zero at the 0.001 level (two-tailed). A further test of whether there is a mediation effect from RBM3F through RBM4F on RBM1F found there is no such significant effect existed.
8. Relationship of PM-H1 (Project Manager's Competency positively influences Organizational Environment): Based on the theory, Project Manager Competency has significant influence to overall project environment and maturity of an organization to increase project success rate. This relationship is statistically supported in this study in the U.N. environment (standardized regression weight = 0.787; $p < 0.05$). The probability of getting a critical ratio as large as 13.507 in absolute value is less than 0.001. In other words, the regression weight for PM1F in the prediction of PM2F is significantly different from zero at the 0.001 level (two-tailed).
9. Relationship of PM-H2 (Project Responsibility positively influences Organizational Environment): Project team's role and its responsibilities should have an impact on organization project environment. However, such relationship is not supported in this study. The result is attributed to most of U.N. organization do not have a central project management office instead of that the project management functions are more with each

office, such as IT department or staff in a project manager role. Consequently, this relationship in the U.N. context is not statistically supported.

10. Relationship of PM-H3 (Organization Environment positively influences Project Efficiency): It is also well supported by our research model (standardized regression weight = 0.918; $p < 0.05$). The probability of getting a critical ratio as large as 12.092 in absolute value is less than 0.001. In other words, the regression weight for PM2F in the prediction of PM4F is significantly different from zero at the 0.001 level (two-tailed). Thus, evidently, a well-established project environment will achieve better project performance at large. However, with the consideration the influence from Project Manager Competency, the indirect effect will also strengthen the overall performance in Project Efficiency. This test supports the notion that PM2F is significant and an important predictor of PM42F. Taking a further test of a mediation effect found there is no such effect existed among PM1F, PM2F, and PM4F.
11. Relationship of PM-H4 (Project Responsibility positively influences Project Efficiency): Strengthening Project Responsibility should have a positive impact on Project Manager Competency. Conversely, this relationship is not supported in this study. The same to the PM-H2 relationship, the finding is attributed to most of U.N. organization do not have a central project management office and formalized project management process except several individual offices, such as IT department, or staff in a project manager role that results in usually no clear responsibility being authorized. As a result, this relationship in the U.N. context is not significantly supported.
12. Relationship of INT-H1 (Strategic Development positively influences Performance Efficiency): Statistically, it is also well supported by our research model (standardized regression weight = 0.310; $p < 0.05$). The probability of getting a critical ratio as large as 6.058 in absolute value is less than 0.001. In other words, the regression weight for SM2F in the prediction of RBM1F is significantly different from zero at the 0.001 level (two-tailed). Thus, evidently, a well Strategic Development will achieve better performance management effectiveness. This test supports the notion that SM2F is significant and an important predictor of RBM1F.
13. Relationship of IN-H2 (Performance Efficiency positively influences Project Efficiency): The results support this integration relationship, RBM1F significantly predicts PM4F

(standardized regression weight = 0.206; $p < 0.05$). The probability of getting a critical ratio as large as 3.383 in absolute value is less than 0.001. In other words, the regression weight for RBM1F in the prediction of PM4F is significantly different from zero at the 0.001 level (two-tailed). Taking a further test on a mediation effect found there is such significant effect existed among SM2F, RBM1F, and PM4F. A discussion about mediation effect will be discussed in Phase Three.

6.8 Mediation Effect of the UNIMM

Further analysis was conducted to examine mediation effect. There are two meditation effects identified during the path analysis. This study argues that strategic management influence on the outcome variable Project Efficiency (strategic implementation) should not be observed as a direct impact, but rather as an influence mediated by the Effectiveness of Performance Management. Therefore, this study hypothesized that the effect of SM2F on PM4F is mediated through Results-Based Management constructs (i.e. RBM1F). To test the mediating effect, we also argued that SM2F is the antecedent of RBM constructs. Therefore, in Phase Three we tested the research model offered in Figure 19.

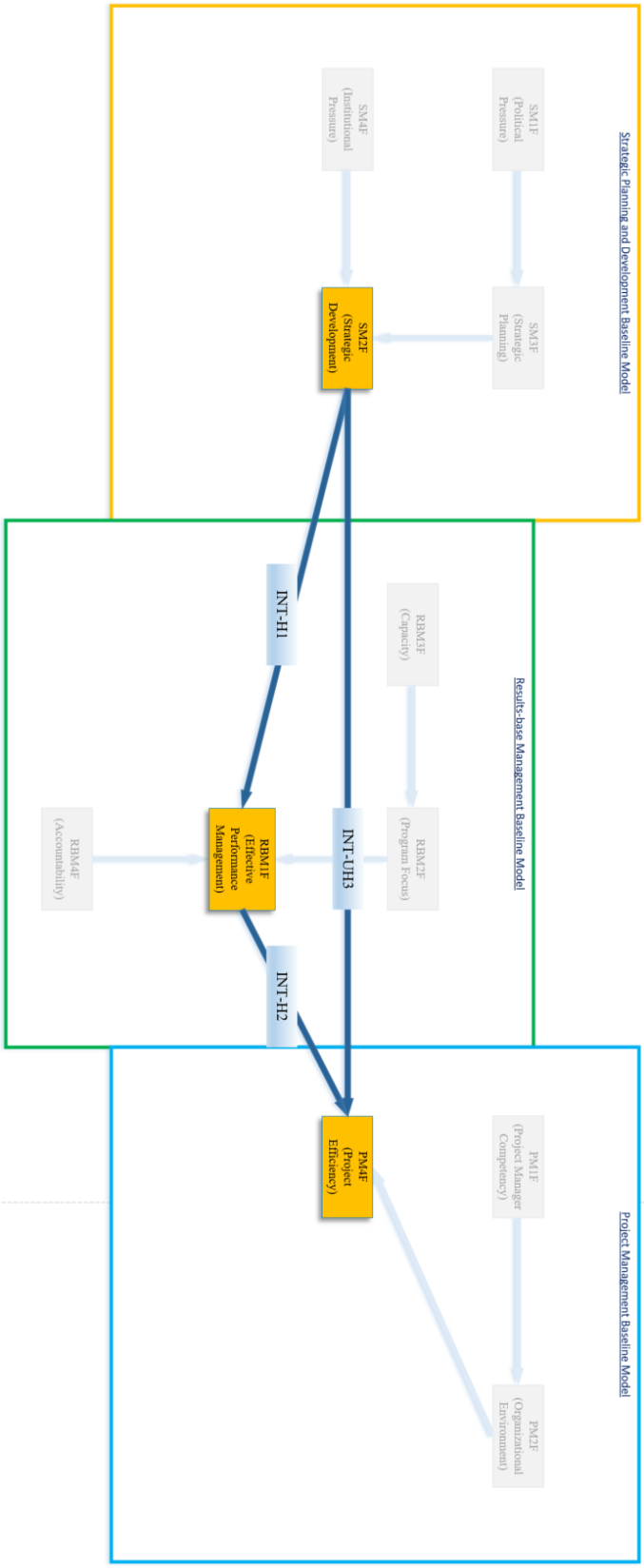


Figure 19: Mediation Effect in the UNIMM

A formal test of the mediating role of constructs (i.e. RBM) was conducted following Baron and Kenny's (1986) procedure, which requires the evaluation of both a direct model (without the links corresponding to the relationship between SM and PM constructs) and the conceptual mediated model (with all links included). This study will establish and test direct relationships first and will use those results as step one in establishing a mediating relationship. The second step, we compare the fit statistics of the two models (the direct model and the mediated model presented in Figure 19) through fit indices results given in Table 57.

Model	Chi-square	DF	CMIN/DF	P-Value	NFI	GFI	IFI	CFI	RMSEA	PCLOSE
Direct Model	35.995	24	1.500	0.055	0.957	0.945	0.985	0.985	0.068	0.241
Mediated Model	36.104	24	1.504	0.054	0.957	0.945	0.985	0.984	0.069	0.237

Table 57: Comparison of Direct Model and Mediated Model of Mediation effect in the UNIMM

To prove mediation, fit indices of the mediated model should show a better fit compared to the direct model. However, following Table 57 above, in our study, the mediated model does not demonstrate a better fit. However, by inspection of mediated model results (regarding path coefficients), presented in Table 58 below, we believe that it is worth to give a closer look at findings again all the hypothesized relationships.

Regression Weights: Direct Model						
			S. Estimate	S.E.	C.R.	P value
SM3F	<---	SM1F	-0.279	0.072	-3.27	0.001
SM2F	<---	SM3F	0.65	0.104	10.612	***
SM2F	<---	SM4F	-0.282	0.067	-4.832	***
RBM2F	<---	RBM3F	0.314	0.064	3.417	***
RBM1F	<---	SM2F	0.309	0.05	6.062	***
PM2F	<---	PM1F	0.787	0.047	13.521	***
RBM1F	<---	RBM2F	2.168	0.78	3.483	***
PM4F	<---	PM2F	0.866	0.074	10.877	***
RBM1F	<---	RBM4F	0.822	0.058	11.646	***
PM4F	<---	SM2F	0.283	0.035	3.341	***
Regression Weights: Mediated Model						
			S. Estimate	S.E.	C.R.	P
SM3F	<---	SM1F	-0.288	0.073	-3.357	***

SM2F	<---	SM3F	0.653	0.104	10.567	***
SM2F	<---	SM4F	-0.272	0.067	-4.68	***
RBM2F	<---	RBM3F	0.313	0.064	3.414	***
RBM1F	<---	SM2F	0.31	0.05	6.058	***
PM2F	<---	PM1F	0.787	0.047	13.507	***
RBM1F	<---	RBM2F	2.167	0.781	3.477	***
PM4F	<---	PM2F	0.918	0.069	12.092	***
RBM1F	<---	RBM4F	0.826	0.059	11.673	***
PM4F	<---	RBM1F	0.206	0.025	3.383	***

Table 58: Relationships in Direct Model and Mediated Model

The results of the assessment in Phase Three are consistent with the results presented in Phase Two that all relationships confirmed in Phase Two are again upheld in this Phase. Following results obtained through Table 58 above, it is evident that INT-H1 and INT-H2 are supported while INT-UH3 (the direct relationship between SM2F and PM4F) is not supported. This study proved that SM2F significantly predicts RBM1F (s. estimate = 0.31; $p < 0.05$) and RBD1F significantly predicts PM4F (s. estimate = 0.206; $p < 0.05$). Comparing to the mediated model, the relationship SM-H1 in the direct mode becomes insignificant. For that reason, the relationships confirmed in Phase Two is, thus, compromised.

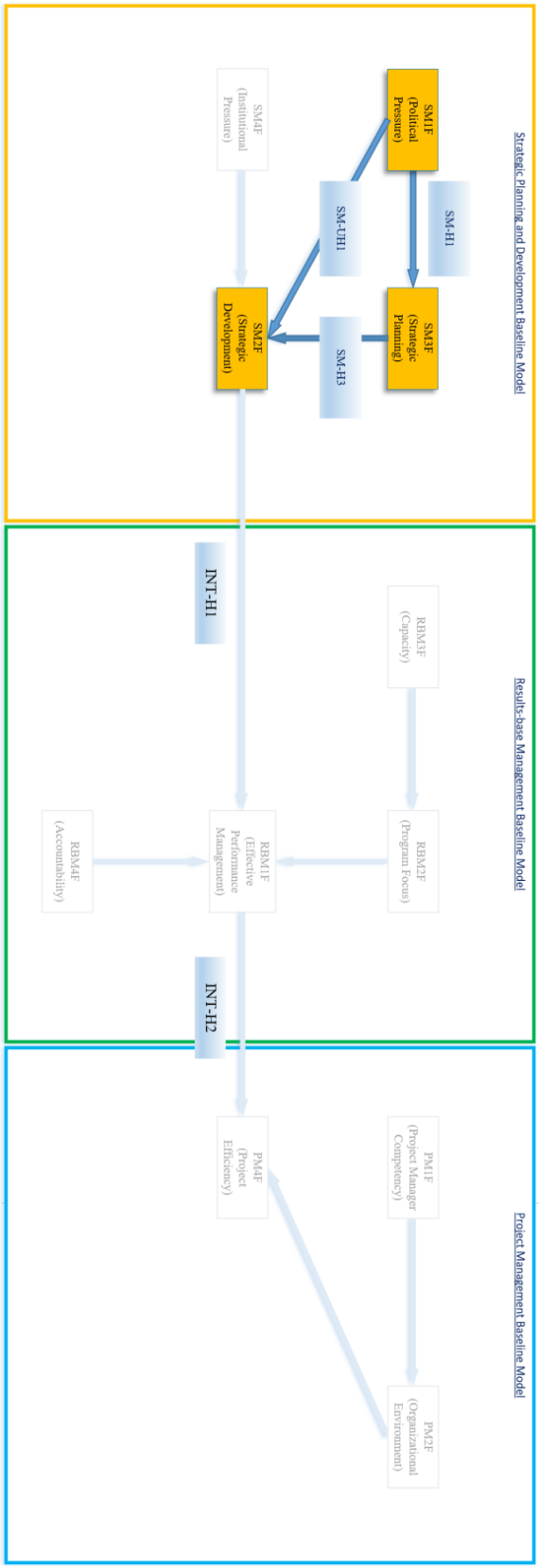


Figure 20: Mediation Effect in the Strategic Management Research Model

This study also confirms a second mediation case in the constructs among SM1F, SM2F, and SM3F, presented in Figure 20 above. Evidently, mediated model is much better than the direct model in model fit by comparing the indices. The direct model is significant (P-Value = 0), therefore is rejected (see Table 59).

Model	Chi-square	DF	CMIN/DF	P-Value	NFI	GFI	IFI	CFI	RMSEA	PCLOSE
Direct Model	110.756	24	4.615	0.000	0.867	0.869	0.893	0.888	0.184	0.000
Mediation Model	36.104	24	1.504	0.054	0.957	0.945	0.985	0.984	0.069	0.237

Table 59: Comparison of Direct Model and Mediated Model of Mediation effect in Strategic Management Research Model

6.9 The Restricted Models Test

To test whether the path between SM2F and RBM1F and the path between RBM1F and PM4F are necessary, three restricted models were established. These models are depicted in Figure 21, 22, and 23. The restricted models force the path coefficient between SM2F and RBM1F, between RBM1F and PPM4F, and both paths to zero.

1. The restricted research model one: restrict the relationship between SM2F and RBM1F by setting INT-H1 to zero (Figure 21).

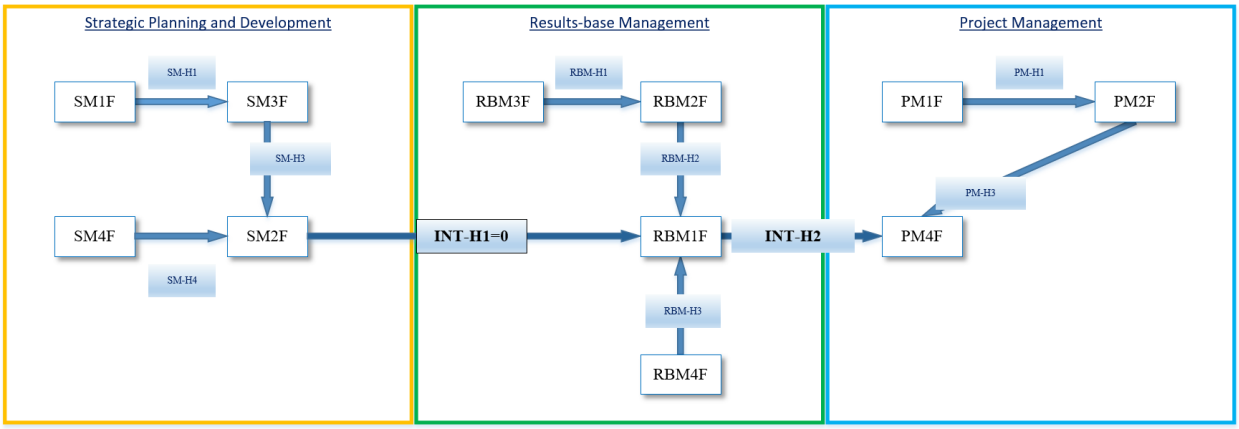


Figure 21: Restricted Model One: Restrict the Relationship between Strategic Management and Results-Based Management

The fit indices of the restricted model one show an acceptable fit (GFI=0.912, NFI = 0.922, CFI = 0.949, IFI = 0.951, RMSEA = 0.102, and 90% confidence interval of RMSEA is between 0.086 and 0.159), except that Chi-square = 64.8 with 25 degree of freedom is significant

(probability value for Chi-square < 0.001). The significant p-value of the Chi-square suggests that the restricted model does not sufficiently capture the variation of the predicted variables. Therefore, the model must be rejected, although some other fit indices are acceptable. There is no other path found significant, and the other coefficients and their direction of effects have almost no difference.

2. The restricted research model two: restrict the relationship between RBM1F and PM4F by setting INT-H0 to zero (Figure 22).

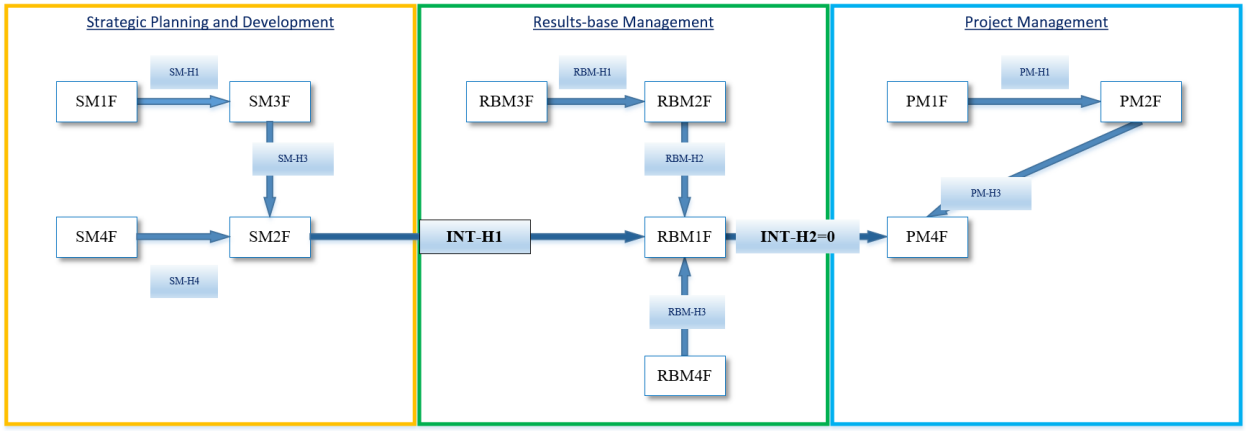


Figure 22: Restricted Model Two: Restrict the Relationship between Results-Based Management and Project Management

The fit indices of the restricted model Two show an acceptable fit (GFI=0.932, NFI = 0.944, CFI = 0.972, IFI = 0.973, RMSEA = 0.090, and 90% confidence interval of RMSEA is between 0.048 and 0.129), except that Chi-square = 40.802 with 21 degree of freedom is significant (probability value for Chi-square = 0.006). The significant p-value of the Chi-square suggests that the restricted model does not sufficiently capture the variation of the predicted variables. Therefore, the model must be rejected, although other fit indices are acceptable. The path between SM2F and PM4F becomes significant. This result suggests that the integrated relationships of both management models are supported, indicated direct effect when the effects of RBM1F is blocked from going to PM4F. The other coefficients and their direction of effects have almost no difference.

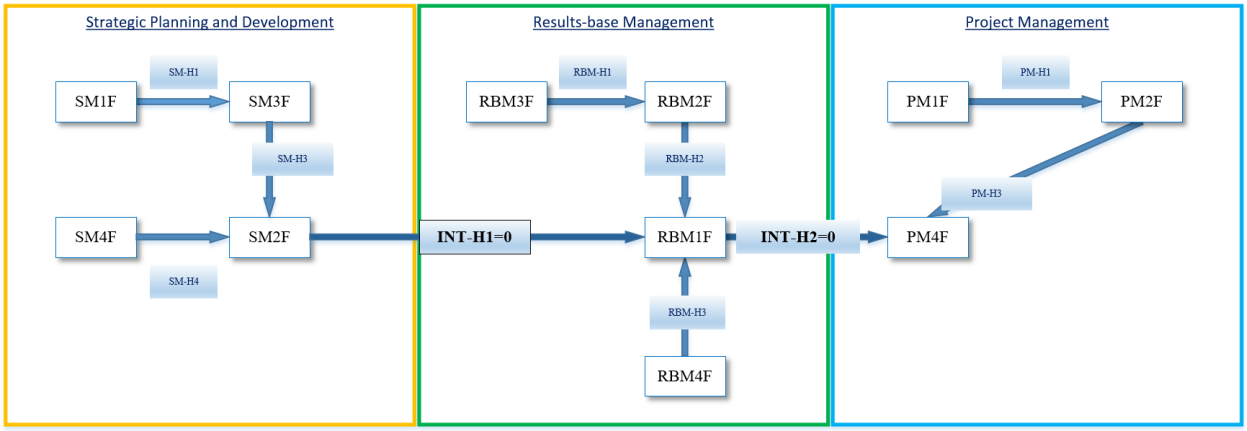


Figure 23: Restricted Model Three: Restrict Both Relationships among Management Models

3. The restricted research model three: restrict the relationship between SM2F and RBM1F and between RBM1F and PM4F by setting INT-H1 and INT-H2 to zero (Figure 23).

The fit indices of the restricted model show an acceptable fit (GFI=0.899, NFI = 0.909, CFI = 0.936, IFI = 0.939, RMSEA = 0.133, and 90% confidence interval of RMSEA is between 0.099 and 0.169), except that Chi-square = 75.373 with 26 degree of freedom is significant (probability value for Chi-square < 0.00001). The significant p-value of the Chi-square suggests that the restricted model does not sufficiently capture the variation of the predicted variables. Therefore, the model must be rejected, although other fit indices are acceptable.

The restricted model is a nested model of the research model. Comparing to the research model, the restricted model one, the Chi-square of the restricted model increases 28.696 with one extra degree of freedom. The restricted model Two, the Chi-square of the restricted model increases 10.362 with one extra degree of freedom, and the restricted model Three, the Chi-square of the restricted model increases 39.269 with two extra degrees of freedom. The results of three restricted models are also significant (rejected all three restricted models), which suggested that the effect of SM2F on RBM1F and RBM1F on PM4F are necessary. The other coefficients and their direction of effects have almost no difference.

6.10 Results by Research Questions

RQ1: What are the factors that influence change management in the U.N. organizations?

As the results presented in Table 24, we could elaborate the new components' characteristics, are significant to U.N. context, as following:

1. Communication factor: the results of this study show that making staff clear on vision and the future state of change, and making the change process in progress, which is leadership, are more influential. The results meet our discussions in chapter two and chapter four that these components are the key to success of U.N. reform.
2. Transparency factor: the transparency in the planning process including structure change and influence from external forces that are generally discussed during the course of the planning phase in change management.
3. Culture factor: we identified three items which are clearly related to resistance and apathy, and patterns typifying change (beliefs) that all can be grouped into cultural and organizational pressures dimension.
4. Staff Participation factor: in this study, we also identified staff involvement are the success of change in U.N. that meet what we discussed the U.N. challenges in chapter four.
5. Resistance factor: the results shows that there is a deep concern about uncertainty and resistance. As examined in chapter two about U.N. change that obviously, these two concerns are common to U.N. organizations.

RQ2: What are the factors that affect strategic management in the U.N. organizations?

As the results of this study presented in Table 46, we can answer this research question as following:

1. Political Pressure factor: The results indicated U.N. organizations are political arenas in which decision-making and strategy development are a political matter. Factors in the environment encourage the adoption of organizational structures and activities which best fit that environment. These external constraints may take the form of regulative coercion, competitive or economic pressures or normative pressures as to what constitutes legitimate organizational action. These pressures limit the role organizational members playing in the choice tend to be common to organizations within U.N. sector with changes coming about through variations in organizations' processes and systems which may occur unintentionally or through imperfect imitation of successful structures, systems or processes.

2. Strategic Development factor: This study also identified influential items associated with the process in the strategic development including procedure, plan and systematic analysis.
3. Strategic Planning factor: In this study, we found that strategic choice takes place through *'successive limited comparisons*.' Strategic vision, goals, and objectives of the organization are not likely to be precise but general in nature in the strategic planning process. In U.N. organizations, the uncertainty of the environment is commonly accepted, and as such managers are not able to know how it will change being in line with political climate change, rather middle-level managers attempt to be sensitive to it through constant environment scanning and programme priority evaluation.
4. Institutional Pressure factor: This factor includes two distinguishing factors from the original theory (Bailey et al, 2000) constructs, namely Cultural and Enforce Choice that represents well for the (internal) Institutional Pressures U.N. organizations face including organizational beliefs, managerial assumptions, and bureaucratic barriers.

RQ3: What are the factors that influence performance management in the U.N. organizations?

The research model of results-based management is based on the current empirical approach the U.N. has adopted at various levels of the programme. This original model comprises six distinct dimensions, interact with strategic management factors, i.e. strategic planning, development, and implementation. As the results of this study presented in Table 47, the factors show the following:

1. Effective Performance Management factor: items from Monitoring and Report dimension mainly load on this new factor to gauge where programmes stand regarding international norms and standards. It helps understand where programmes are in relationship to results planned, to track progress (by expected results and agreed indicators), and to identify issues and analyze relevant information and reports that become available as implementation occurs. Further, many have found, not unexpectedly, that some types of U.N. programmes and mission services are more amenable to measurement than others. Items from Support System are also only loaded on this new factor show how a performance information system is implemented in a U.N. organization is critical to its success. Combining other items from the Adjustment and Accountability dimensions, is evidence that this new factor is more

focused on ensuring performance efficiency and seeking to facilitate system-wide collaboration on the measurement and assessment of performance within the United Nations system. Consequently, this factor provides a reference for strengthening, professionalizing and improving the quality of evaluation in all bodies of the United Nations organizations.

2. Program Focus factor: this factor is the same as an original factor in theory. It explains while the planning phase United Nations agencies serve to prepare a programme management framework, more attention needs to be placed on managing and monitoring programme outcome results. Flow and consistency of results should be maintained among the various programming instruments, the agency operational plans down to annual work plans. Effectively utilizing RBM, therefore, requires a proper management structure in line with programme focus.
3. Capacity factor: Only items from Culture and Leadership were landed on this factor. Almost all discussions of building performance systems stress the importance of adequate well-trained and enough resources (including budget, time, people and knowledge) could allow operation manages to carry out their core functions. During the exercise of budget cut in U.N. organization, resource, especial that well-trained resource becomes a crucial factor impact on program performance.
4. Accountability factor: the concerns are accentuating on business managers should have the latitude, flexibility, and authority to arrange resources (financial and personnel) as required to achieve the desired outcomes. Therefore, there should establish a clear link between the allocation of required resources and mandated programme and evidence of results in my office programme. Department head, the responsible person, can hold responsible for the delivery of organization's outputs. Indeed, due to environmental influence, accountability becomes vague in U.N. organizations. The consequences from that introduce significant impact to the efficiency of programme delivery and performance as a whole.

RQ4: What are the critical success factors for projects and project management in U.N. organizations?

As the results of this study presented in Table 48, project management model examines the factors and relationships of project management in the U.N. organizations, presently engaged in the process of integration of the project management approach to enhance the levels of project success. The results from this study support previous study done by Saade and Wan (2015 and 2017) that the items from Project Management's Competency, Organization and Environment, and Effectiveness of Project Management are well loaded as theory presented. We can also conclude the fourth factor is grouped based on the characteristics of project governing structure as well as its responsibilities. Therefore, this study concluded the final research model with factors of Project Manager's Competency, Project Environment, Project Responsibility, and Project Efficiency, respectively.

RQ5: What is the connection between strategic management and performance management in U.N. organizations?

This characteristic represents the performance relative to a number of resources used under stated conditions. Better outcomes from strategic development (including influential items of precise procedure, definite plan, and systematic analysis of business environment) will strengthen the effectiveness of performance efficiency in performance management. According to the international organization for standardization (ISO) 25010, the performance efficiency in management represents response behavior, resource utilization, and sustainable capacity.

RQ6: What is the relationship between performance management and project management in U.N. organizations?

Project efficiency represents project meeting cost, time and scope goals. However, it is often debatable that '*there are many cases where projects are executed as planned, on time, on budget and achieve the intended performance goals, but turn out to be complete failures because they failed to produce actual benefits to the customer or adequate revenue and profit for the performing organization*.' Therefore, project efficiency is important to project success, because if

the project is completed late and over budget, it will be harder for it to be a business success. In this study, we consider both are critical dimensions to the project success.

RQ7: What is(are) the integration effect(s) of strategic management, performance management, and project management in U.N. organizations?

The results of this study confirm the strategic development of strategic management model positively influences Performance Efficiency in performance management model. Statistically, it is well supported by our research model. Thus, we can conclude a well strategic development process will achieve better performance management effectiveness. In order to achieve better strategic development, we also confirm a well organized strategic planning process should be in place. At the same, the efforts put to minimize the negative from political and institutional pressures would help to achieve the optimal effect. That effect will directly influence performance efficiency, which will also positively influences project efficiency in project management model. In this study we also carry out three controlled tests and found, only the UNIMM can achieve such positive results. Any partial integration effort will only produce a limited effect.

RQ8: What is(are) the mediation effect(s) of strategic management, performance management, and project management in U.N. organizations?

This study also tested two mediation effect. The results confirmed the mediation effect does exist in UNIMM and its effect is more supportive than direct effect in the research model.

CHAPTER 7 THE JUST-IN-TIME MANAGEMENT

The intensification of globalization and some regional crisis occurred in the past decade has affected all U.N. organizations. That global climate (political and economic) changes forced U.N. to explore all available opportunities through management reforms for efficiency and effectiveness of delivering JIT services and missions to the member-states. Commonly understood by industry practitioners, the concept of JIT has often been considered as a preserve of distribution system, usually, are adopted in supply-chain sectors, such as manufacturing and construction. Industries use the framework as a management thinking as well as a production scheme to reduce extra fat with aims of expediting production processes. The same concept can also apply to management reforms and to achieve sustainable development goals in U.N., for example, by integrating corporate performance management on the organizational level and project management on the country-level programme. In academia, some researchers also look to JIT as a management philosophy, which evolved to a business level strategy where its concept can be applied throughout an organization. In particular, the cross-functional integration of JIT in various systems like production, supply chain, budget & financial, human resource, and enterprise architecture can provide continuous improvement and sustain a source including time, resource, and knowledge of differential advantage for the organization. The fundamental component of JIT, later being transformed to Lean, is the elimination of waste while adding value. However, the traditional JIT or Lean management is a process-based approach. From a multidisciplinary management view, this study proposes a notion of JIT (or Lean) based on UNIMM to U.N. context.

7.1 Traditional View of Just-In-Time Framework

What is Just-In-Time framework? The original concept of JIT was industrialized into a production system by Toyota Motor Company of Japan. Since then, various JIT concepts are being applied in a variety of industries across the globe due to its successful lean approach in cost reduction. Survey and case studies of industries of the United States, Germany, Korea, China, and India have shown growing recognition of JIT. Practitioners from those industries have increasingly explored the possibility of applying knowledge to solve the waste problems (Bresnen and Marshall, 2001; Bates et al., 1999; Bertelsen, 2002). On the other hand, as Gupta (2012) claimed, JIT can be considered as a system to eliminate wastefulness to achieve improved performance in an

organization as a whole. Oral et al. (2003) argued that the industry could also benefit from JIT regarding substantial productivity and quality problems. In addition, Lim Cai (2013) pointed out that the sole purpose of JIT is to eradicate all kinds of waste. Some researchers also treat JIT an approach, which is demand driven and promotes workflow type production system. It can be described as an initiative to simplify the supply chain system to quickly detect the problems due to lengthy lead time or inadequacy workflow and force immediate solutions. From a corporate performance perspective, JIT can be summarized as a framework to eliminate inefficiency and achieve better results-based fulfillment in an entire organization. In summary, JIT is a management strategy used to elevate and streamline all sorts of business processes. Regarding '*inefficiency*' or '*waste*,' it may also include anything that is not necessary or excess over necessary, namely '*Just-Enough*,' in the use of a U.N. programme or mission resources. The sole purpose of JIT is to achieve efficiency and effectiveness that are the same goals U.N. organizations would like to achieve today.

7.2 Adapting JIT Principles to the U.N.

Previous studies have reported the benefits of JIT in improving productivity that the concept of JIT has often been considered a preserve of manufacturing and distribution functions. However, the philosophy has progressed to a strategic level where the concept can be applied throughout an organization. JIT is viewed by Gyampah and Gargeya (2001) as a long-term management strategy that can encourage excellence and reduce inefficiency throughout the entire organization. This history can be traced back to Lim and Low's (1992) book, which collated the distinctive features and broad principles of JIT. This concept was further adopted by Low and Chan (1997) with the development of a JIT framework. This comparison framework between Low and Chan's model (1997) and the integrated management model from Chapter 6 is shown in Figure 24 below. In the same way, the positive results obtained from the application of JIT could also apply to UNIMM, which would advocate relevance to the member-states including:

1. Enhancement of programme consistency and services continuity meet member-states' requirements, expectations, and being relevant;
2. Improvement in-time services of programmes and missions to member-states;
3. Productivity enhancement by eliminating the lead time and unnecessary inventory;
4. Overall operation cost reduction by removing duplicated efforts;

5. Improving partnership with member-states; and
6. Planning of programme and mission schedule;

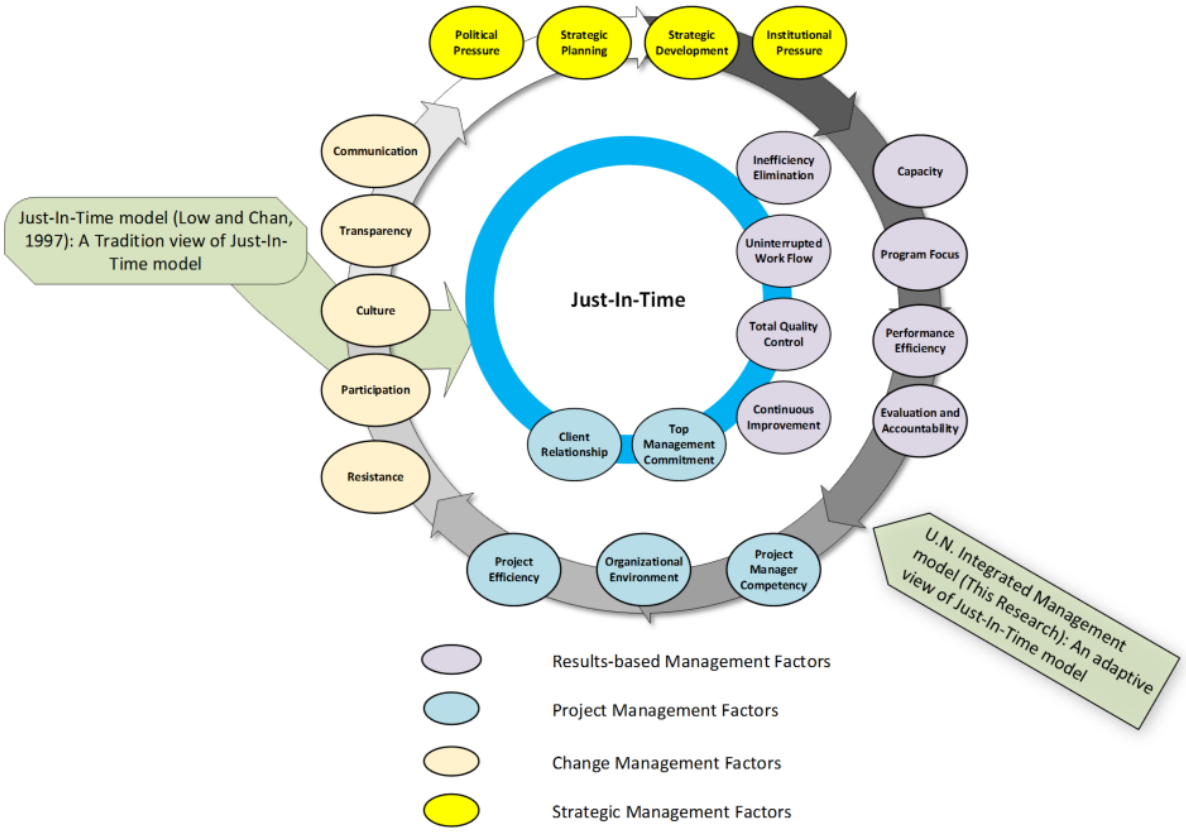


Figure 24: Comparison of Traditional JIT Model and Adaptive UNJIT Model

The benefits of JIT cannot be attained without initial investments (Waters, 2009.) For example, well-established enterprise architecture, integrated with systems such as HR, Finance, procurement and ERP systems, and more skilled U.N. staff also demand more continuous learning and improvement adjustment that often lead to higher training costs (Waters, 2009; Polat and Arditi, 2005). However, from the experience of other sectors, some organizations failed to implement JIT concepts due to a variety of issues, e.g., uncertainty, resistance, apathy, inflexibility, and some other institutional problems that can be well addressed by the research model presented in this study. Oral et al. (2003) summarized that common characteristics are likely to impact on JIT implementation, for example, costs, productivity, and culture (environment). All those mentioned influencing factors were also discussed in this study. Low and Chan (1997) categorized seven dimensions of influencing factors that would have a substantial effect on JIT implementation.

7.3 Development of U.N. JIT Conceptual Framework

The traditional JIT (Traditional View) has its limitation, which solely focuses on building a zero-fat supply chain process in the manufacturing industry. However, as more often understood, reduction in inefficiency is not only a production system matter of an organization. As deepening in globalization, international organizations cannot remain business relevant and maintain competitive advantages without engaging efficient strategic thinking, planning, development and strategic implementation process in place, linked to evaluation and monitoring in performance and change management to become an effective adjustment management cycle for further improvement. All those management frameworks mentioned above could not address global challenges alone that organizations face today.

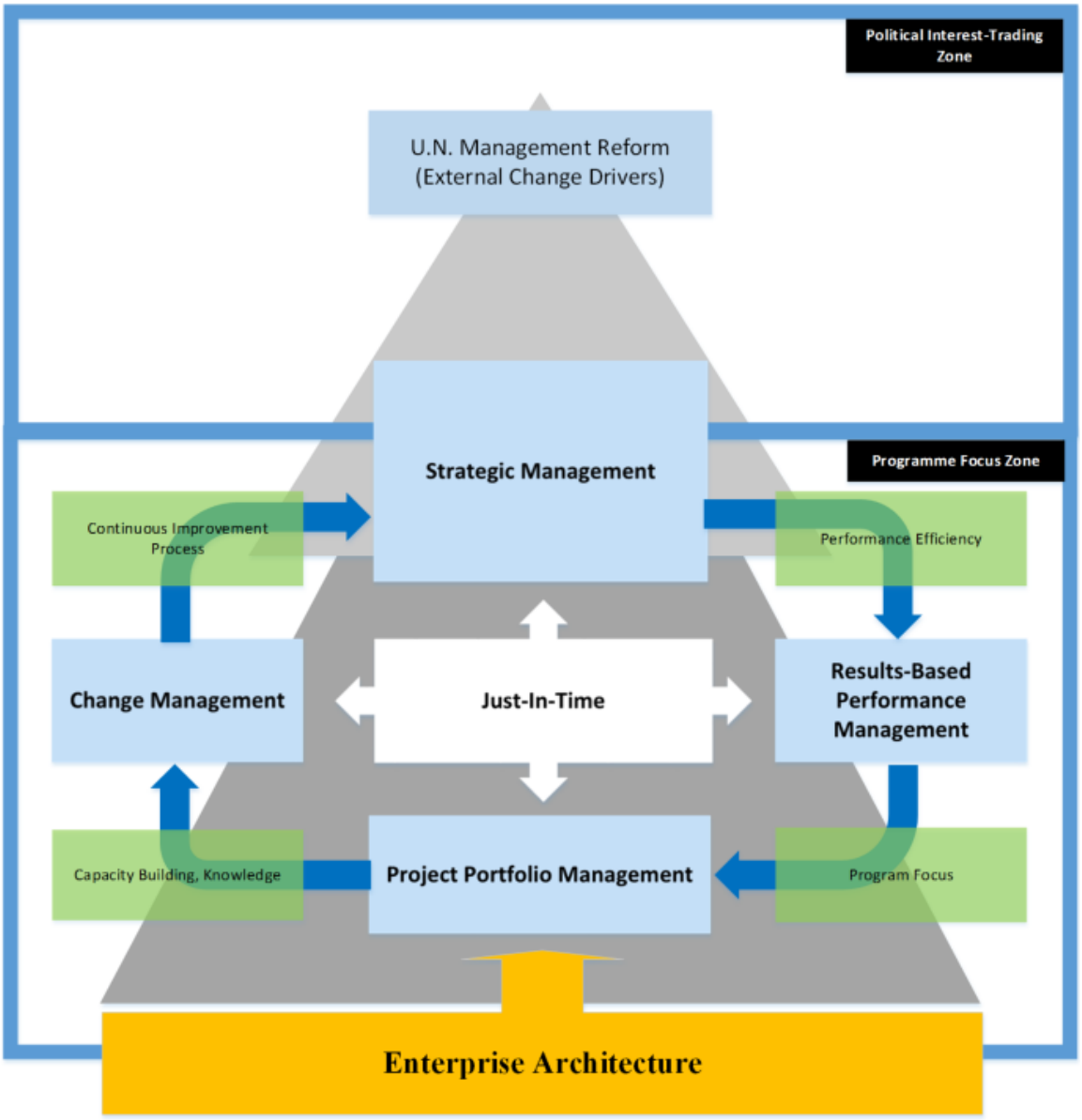


Figure 25: UNJIT Management Model

Thus, U.N. JIT (UNJIT) conceptual framework, an adaptive view of JIT, is a theoretical approach that minimizes ineffectiveness of all factors associated with strategic management, performance management, project portfolio management and change management process into a completed management system to address U.N. needs. The proposed concept presented in Figure 25 shows how the organization produces what is required when it is necessary, and in the quantity that is needed, by introducing JIT component of the conceptual model. The JIT can also be integrated with the results-based management as producing the necessary outputs, with the required quality, in the necessary quantities, at the last safe moment. It also benefits a U.N. organization managing

its resources and allocates them very easily as well as at the same time being in line with the strategic goals of the business. This model will also not only apply to supply-chain industries but also potentially to management systems in other sectors.

Based on the results from the integrated management model, both performance management and project management frameworks show strong common indications that clear responsibility, competency, and adequate resources, e.g. staff time and sufficient training to the staff, are crucial to the success of these management frameworks. On the other hand, the findings of strategic management and change management indicate the importance of transparency in the strategic planning process and of clear implementation procedure. In particular, placing efforts in the reduction of institution briefs and bureaucratic barriers will dramatically improve overall performance as a whole. Therefore, those U.N. organizations either are '*young*' or are with strong financial resources would appear more likely to receive benefits from UNJIT implementation. In addition to the financial considerations, the implementation of UNJIT would also bring tremendous organizational change. In the event that this change will extend to the entire U.N. family, however, the implementation of UNJIT in the U.N. is not suggestive to be carried out by all U.N. organizations at the same time due to tremendous resources and efforts being required as well as committed for such effect in place. A reasonable approach would be to offer experimental trials among the larger, better endowed, and well self-funded organizations that are likely to adopt UNJIT as a long-term strategy. In the event that a decision is made to proceed with the UNJIT philosophy, the implementation requires careful consideration and planning. Figure 26 offers a framework for the adoption of UNJIT principles in the management areas, elaborated in the following sections, in the U.N. context.

Figure 26: UNJIT Framework

7.4 Integrating UNJIT with Strategic Management

Most U.N. agencies recognize the importance of strategic planning, but only few succeed at turning their strategies into results benefiting member-states. Instead, most of the so-called strategic plan was translated later as a business '*as usual*' plan with business objectives that rarely changed. One reason is that many organizations paid more attention to devising strategies regarding '*what*' its process is rather than '*how*' to carry them out. The well-decorated exercises in such

strategic planning are constantly followed by piles of paper works and endless discussions that left less time for deployment and poor implementation.

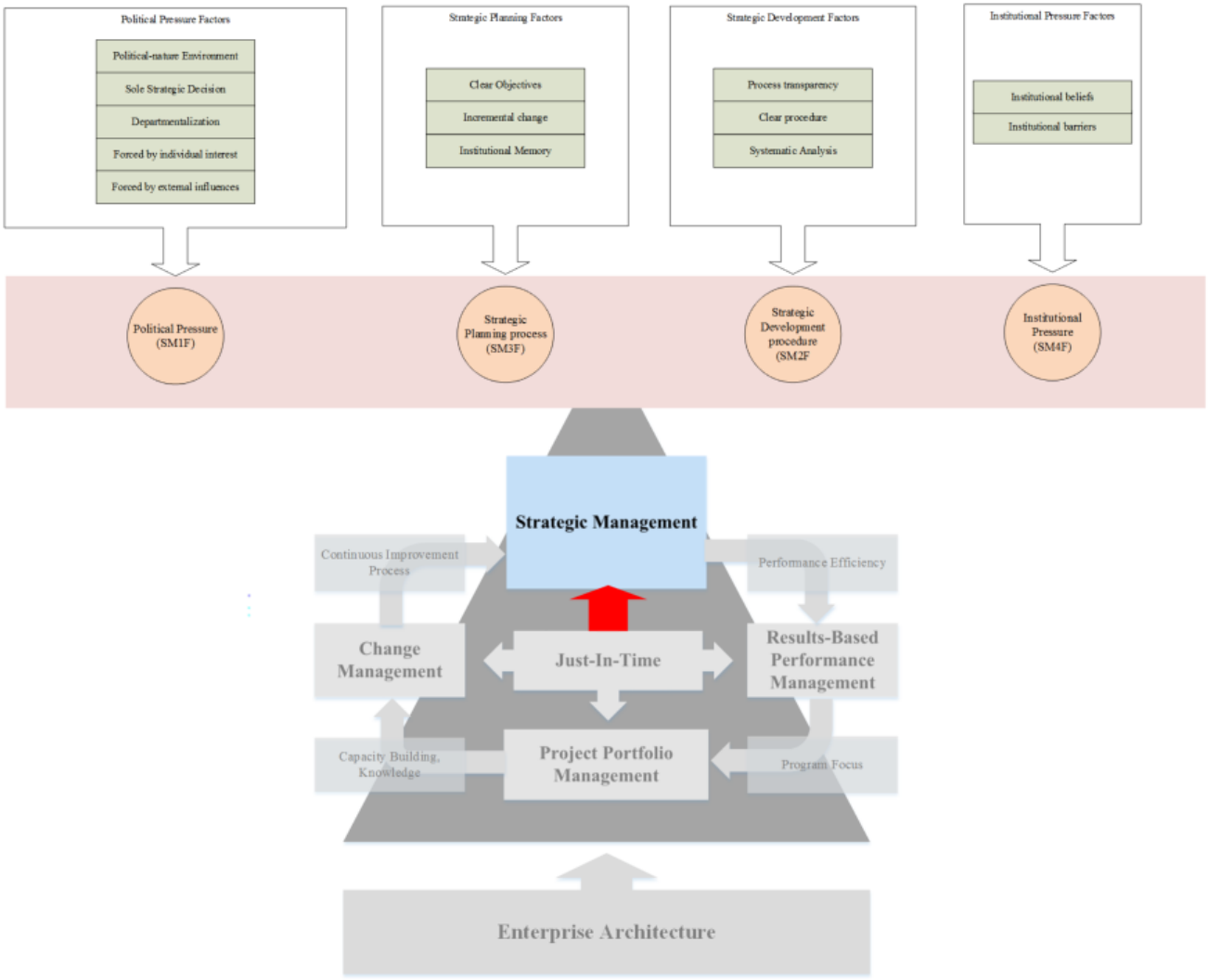


Figure 27: Integrating UNJIT with Strategic Management

Thus today, it is also common that the strategic management process separate from strategic implementations (project management), which is a source of inefficiency and should be aligned and integrated (Figure 27). The pervasive belief is that a clear business strategy will implement itself only contributes to this oversight. Nothing could be further from the truth. Not even a brilliant strategy can ensure a quality implementation. No matter how well senior management conceives it in the U.N. organizations, a business strategy becomes virtually worthless when others in the organization misinterpret it, block it or simply do not know how to act on it. Obviously, no arguments mentioned above represent the actual value of strategic management today in the United

Nations. One of the contributions from this study is that we statistically identified some '*lean*' as well as critical factors to make U.N. strategic management process more relevant, effective and efficient to the organization. There is no doubt those factors have a direct influence on a U.N. organization's mission and goals. Like other strategic planning elements that affect strategy indirectly, the factors affect strategy through their effect on the organization's achievement of its aims and their ability to enable the success of the mission. In the U.N. context, the political and institutional pressures are branded as '*organization barriers*,' which have a negative influence on strategic planning and indirectly have a significant influence on programme and mission implementation. Institutional memory (knowledge) is '*organizational guiding principle.*' Twenty-four items were examined, we identified the five most influential that can be considered as an '*enabler,*' to U.N. organizations:

1. Clear strategic objectives: U.N. organizations exist to achieve goals mandated by all member-states. To make these goals effective and efficient, objectives are important. U.N. strategic targets have the following importance characteristics:
    a. Direction: Objectives provide needed guidelines for U.N. Once objectives are framed all activities are directed towards achieving such objectives.
    b. Legitimacy: Objectives help U.N. to have its unique legal as well as political existence and to continue its operations. This legal status as an intergovernmental body improves the image of the organization among the in the global society.
    c. Coordination: Common objectives of the organization triggers the efforts of managers at all levels to focus their efforts towards achieving the common goal.
    d. Standardization: Objectives form standards for the organizations. They become key performance indicators measuring the achievements or failures of organizations.
    e. Motivators: People at all levels are motivated to achieve the agreed goals set through objectives. They kindle the enthusiasm and spirits of U.N. staff members at all levels.
2. Continuous adjustment for improvement (incrementalism): Incremental strategic planning identifies the changes a U.N. organization needs to implement to improve specific conditions, whether these are community conditions or organizational conditions. That is a recommended approach while most U.N. organizations have own priorities and mandates to achieve, meanwhile, also shared common U.N. goals. Additionally, incremental plans provide very clear direction on political and funding priorities. Because incremental plans

do not pay attention to a broad organizational focus, which is fixed to U.N., operational units that are responsible for maintaining programs or performing '*enduring*' activities have difficulty aligning their operations to the plan. By doing so, the political influence to the programme focus can be minimized.

3. Process transparency to encourage staff participation: In today's increasingly connected, competitive and rapidly changing global environments, the staff members working within U.N. organizations need to be able to quickly access all relevant expertise and information, wherever it may reside, and trust it enough to act upon it. None of that can be completed if organizations do not become more open and transparent. Transparency not only can promote a culture of trust, but also encourage better relationships and partnerships with the U.N. business. To U.N. staff could also have better alignment with U.N.'s mission and priorities mean looking at the big picture and seeking to understand roles within it. That can be certainly done when staff practice transparency in the workplace. Transparent leadership results in staff members who understand U.N.'s vision and how the efforts help achieve U.N.-wide goals.
4. Clear procedure to follow: A strategic planning system is nothing more than a structured (that is, designed) process that organizes and coordinates the activities of the managers who do the planning. No universal, off-the-shelf planning system exists for the straightforward and obvious reason that companies differ in size, diversity of operations, the way they are organized, and managers' style and philosophy. An effective planning system requires '*situational design*.' It must take into account the particular U.N. organization's situation, especially along the dimensions of size and diversity. To make the process and procedure clear to staff that will promote understanding and support the organization.
5. Well systematic analysis (environmental scanning). A strategic planning system has two major functions: to develop an integrated, coordinated, and consistent long-term plan of action, and to facilitate adaptation of the corporation to environmental change. When introducing and developing such a system, organizations commonly concentrate on its integrative aspects. The design of the scheme, however, must also include the function of environmental scanning to make sure that the planning effort also fulfills its adaptive mission.

Figure 28: Short-Term Management Realignment Process: Strategic Management

In summary, we can conclude that transparency in the process, clear procedure and systematic analysis in business environment evidently will introduce a direct as well as significant effect on the integrated management framework for the U.N. context by influencing both performance and project efficiencies. Staff participation in strategic choice, reduction of bureaucracy and power influence, continuous incremental adjustment, and reduction of negative institutional influences such as barriers and beliefs will have a direct effect on improving the strategic management process and an indirect influence on U.N. integrated management framework. As an example, consider the case when a power member state imposed a mandate on strategic direction, which may drive the U.N. towards an inefficient situation. That situation will later form as a U.N. business plan that could negatively affect the U.N. programme and organizational performance as a whole. Nevertheless, with a continuous incremental self-improvement process within the strategic management model will maintain alignment of the process within the overall UNJIU management framework in the long run (Figure 27). Table 60 adopts the attribute-value language (Giraud-Carrier, 1995) to represent the influence framework, illustrates the mapping for the U.N. integrated strategic management framework in the table: '1' stands for a scenario once occurred in the specified factor influencing on the targeted '1T' factor. '0' means no significant effect found. This mapping will help on the establishment of management framework from the influence flows.

Items	SM1F	SM2F	SM3F	SM4F	RBM1F	Effect on Integrated
	Political Pressure	Strategic Development	Strategic Planning	Institutional Pressure	Performance Efficiency	Management Framework
Our freedom of strategic choice is severely restricted by our business environment	1	0	1T	0	0	Indirect
Our strategies often have to be changed because certain groups block their implementation	1	0	1T	0	0	Indirect
Our strategy is closely associated with a particular individual	1	0	1T	0	0	Indirect
Our chief executive tends to impose strategic decisions (rather than consulting the top management team)	1	0	1T	0	0	Indirect
Many of the strategic changes which have taken place forced on us by those outside this organization	1	0	1T	0	0	Indirect
We have definite and precise strategic objectives	0	1T	1	0	0	Indirect
To keep in line with our business environment we make continual small-scale changes to strategy	0	1T	1	0	0	Indirect
Our organization's history directs our search for solutions to strategic issues	0	1T	1	0	0	Indirect
There are beliefs and assumptions about the way to do things which are specific to this organization	0	1T	0	1	0	Indirect
Barriers exist in our business environment which significantly restrict the strategies we can follow	0	1T	0	1	0	Indirect
We have precise procedures for achieving strategic objectives	0	1	0	0	1T	Direct
Our strategy is made explicit in the form of precise plans	0	1	0	0	1T	Direct
We make strategic decisions based on a systematic analysis of our business environment	0	1	0	0	1T	Direct

Table 60: Strategic Management Framework Mapping

7.5 Integrating UNJIT with Performance Management

Different U.N. organizations define results-based management in a variety of ways, yet there is a strong common denominator among definitions. All reflect the underlying idea of learning from empirical evidence based on experience and using that information to manage. For results-based management to be successful, U.N. organizations need to develop and nurture a culture of results where inquiry, evidence, and learning are considered essential to good management. The use of results information in managing is usually understood as the main aim of introducing results-based management. In U.N. results-based management, all levels of managers are expected to:

1. Figure out why the programme and projects can contribute to the outcomes sought - the theory of change.
2. Set outstanding performance expectations & targets for the main outputs, outcomes, and results.

3. Measure and analyze results and assess the contribution being made by the programme to the observed outcomes/impact.
4. Deliberately learn from this evidence and analysis to adjust delivery and, periodically, modify or confirm programme design.
5. Report on the performance achieved against expectations - outcomes accomplished and the contribution being made by the programme, i.e. what difference it is making.

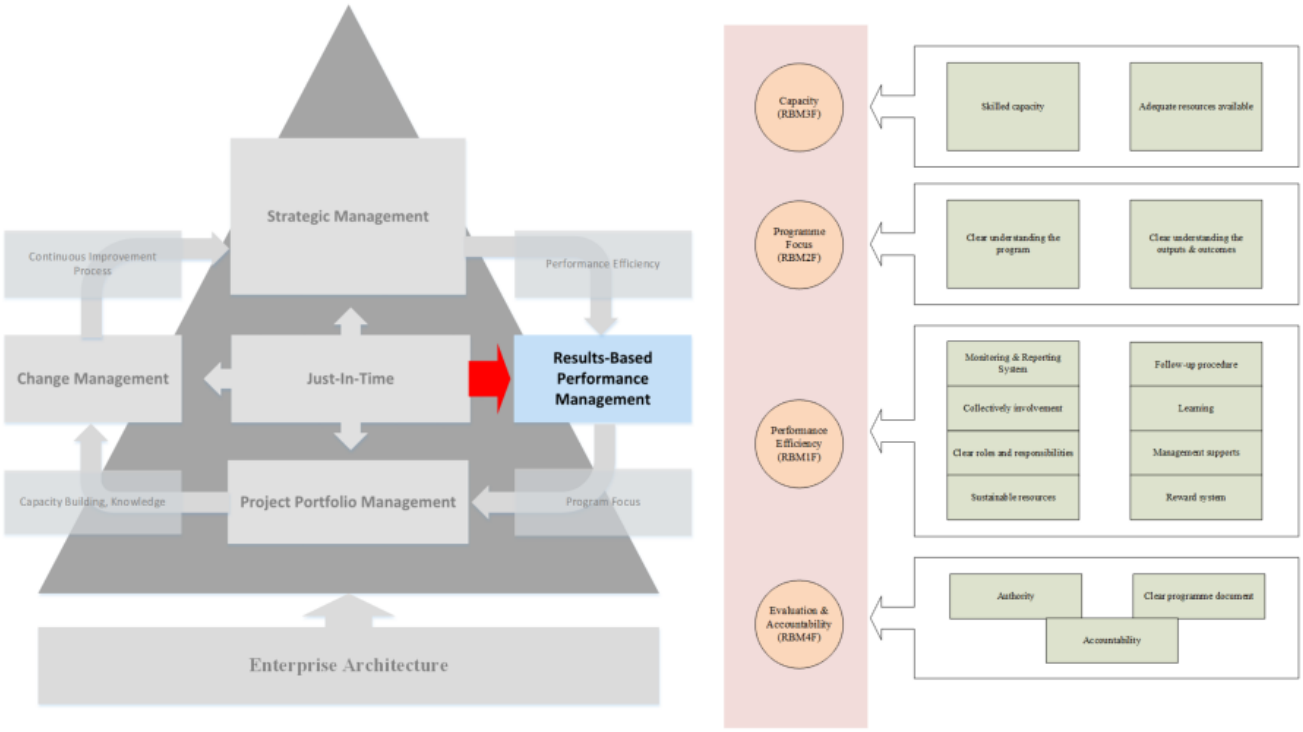


Figure 29: Integrating UNJIT with Results-Based Management

When results-based management was introduced in U.N., it was seen as involving all the above features, and the importance of a culture of results was well recognized (Figure 29). Evidently, the identified factors have a significant effect on the success of this performance implementation in the U.N. context. However, the challenges in implementing results-based management in an organization are numerous other than focus mentioned above. Perhaps the key is the importance of emphasizing '*management and learning*' over monitoring, reporting and support systems, to foster a '*culture of performance*.' Developing results frameworks, measuring results and reporting results in an organization clearly will involve systems. If a culture of performance can be developed, then the main purpose of results-based management will not be lost

if it involves knowledge management in the first place. Resource availability commitments from the top management, especially to those skilled as well as well-trained staff, is crucial to ensure development sustainability. Though, without strong efforts to develop and support such a culture, the systems could become the dominant feature. Senior managers have a special role to play in fostering this climate of results through clear leadership and demonstrating that results and results management do matter. Last but not the least, from this study, this study also identified '*reward system*' is also playing an important role in performance management system. Even though it is not usual U.N. pay attention to such an implementation on the corporate programme performance level. Still, it does apply to staff performance level.

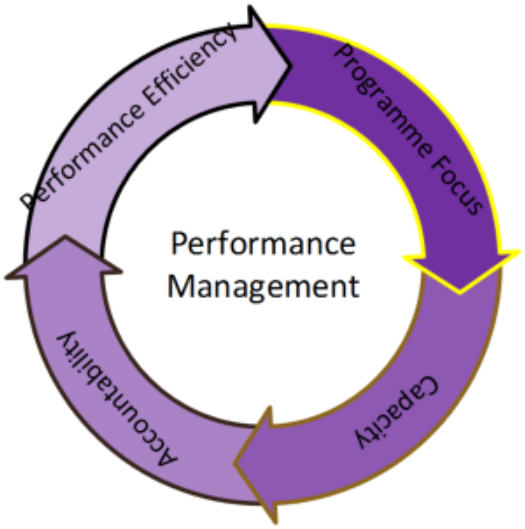


Figure 30: Short-Term Management Realignment Process: Performance Management

In the U.N. integrated performance management framework, programme monitoring and reporting, performance evaluation, clear roles and responsibilities, top management supports, adequate resources and proper rewards system will have a significant effect on the project efficiency of the U.N. integrated management framework. Implementing with practices on continuous improvement in learning through a training programme, accumulating institutional knowledge, clear authority in resources and decision making to managers will help to increase the overall effectiveness of U.N. performance management framework. They also contribute indirect influence on the overall integrated management framework. For example, proper training offers to staff members will positively improve staff's capacity and then contribute to performance

efficiency in the end. Table 61 summarizes the mapping of U.N. performance management framework. The process of integrated performance management will be improved and realigned with overall integrated U.N. management framework to achieve optimal efficiency in a long run (Figure 29).

Items	RBM1F	RBM2F	RBM3F	RBM4F	PM4F	Effect on Integrated Management Framework
	Performance Efficiency	Porgram Focus	Capacity	Accountability	Project Efficiency	
My organization has an effective outcome monitoring tool.	1	0	0	0	1T	Direct
My organization has more than one monitoring tool in use at different management levels, such as HQ, regional offices, and country offices.	1	0	0	0	1T	Direct
Monitoring and reporting are well harmonized with other development partners and make use of region/state/field office reporting systems.	1	0	0	0	1T	Direct
Stakeholders and managers collectively analyze performance and decide on action.	1	0	0	0	1T	Direct
There are an effective follow-up and actions taken on management response to performance evaluations.	1	0	0	0	1T	Direct
Roles and responsibilities at all levels in my organization are clearly set out and known to staff.	1	0	0	0	1T	Direct
My organization is demonstrating a proven ability to raise resources and in delivery.	1	0	0	0	1T	Direct
I can easily find guidelines and support from my supervisors to help design objectives and indicators for projects and programmes.	1	0	0	0	1T	Direct
In our office, adequate time and structured occasions are made available to learn from results and evaluations.	1	0	0	0	1T	Direct
My organization's rewards systems provide real incentives for strengthening a results culture within the organization.	1	0	0	0	1T	Direct
I can confidently explain to my colleagues and development partners the difference between an output and an outcome.	1T	1	0	0	0	Indirect
I can explain clearly how outputs contribute to programme outcomes.	1T	1	0	0	0	Indirect
Adequate trained resources are available for operating the program performance management system.	0	1T	1	0	0	Indirect
Adequate staff time allocated for operating the results-based management system.	0	1T	1	0	0	Indirect
Business managers have the latitude, flexibility, and authority to arrange resources (financial and personnel) as required to achieve the desired outcomes.	1T	0	0	1	0	Indirect
There is a clear link between the allocation of required resources and mandated programme and evidence of results in my office programme.	1T	0	0	1	0	Indirect
Department head can only be held accountable for the delivery of organization's outputs.	1T	0	0	1	0	Indirect

Table 61: Performance Management Framework Mapping

7.6 Integrating UNJIT with Project Management

It is broadly acknowledged that project managers need attentive efforts to gain an extended comprehension of the potential effects of the lean factors, which in turn could assist U.N. works on current and future project implementations (Figure 31). This way, the chances of achieving the projected goals could substantially increase in the framework of time, resources, and budget constraints. This study suggests a version of a JIT model for assessment of the effects of lean factors on the degree of project success. It considers, in particular, the critical factors of project success in respect of projects implemented by U.N. organizations. Empirical support for the impact of such critical factors of project success is provided by the survey data, which brings out evidence about their potential impacts on various levels of project activities.

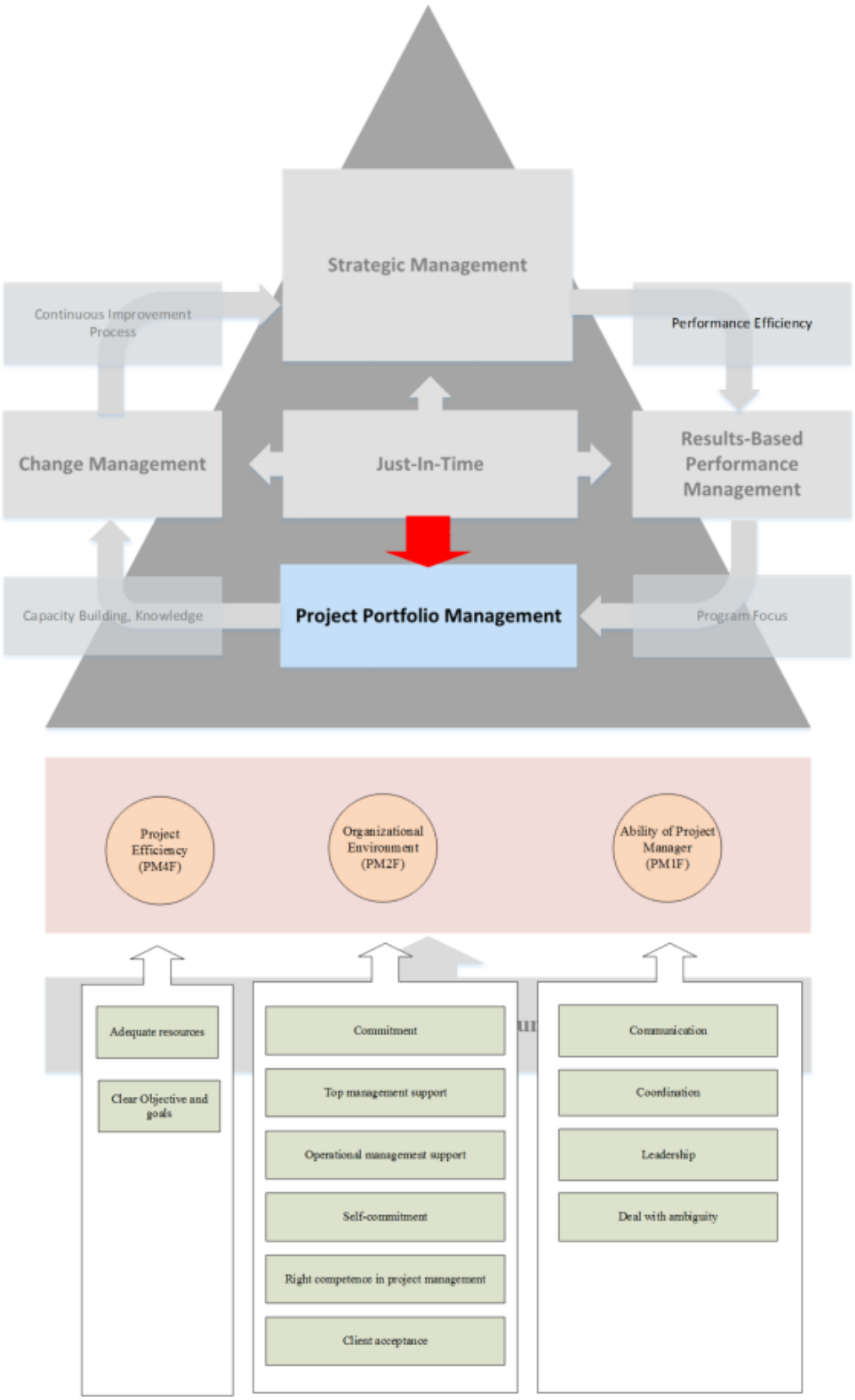


Figure 31: Integrating UNJIT with Project Management

1. The '*competence of project manager'* has been identified as the most important factor in project success. This research also indicated that this aspect was '*crucial*' for the successful realization of U.N. projects. This factor is related to the skills and characteristics of project managers, which are critical to the successful completion of any project. That provides an additional empirical evidence in support of previous research indicating that able to deal with ambiguity, communication and coordination skills of the project manager, as well as his/her leadership and competence, becomes the most critical component during the project life cycle;
2. Another critical factor is the degree of '*project efficiency*,' or in other words, the effective recruitment of adequate resources to support the project implementations and clear project objectives and goals to achieve. Evidently, the knowledge, skills, personal aims, and personal traits should be considered not only as a vital component of the overall organizational culture but also as an essential factor of the integrity and multi-functionality of the project team.
3. The fourth critical factor is the '*organizational environment*' of the organization where the project executes in. Top management support, commitment to project success, and client acceptance were indicated as significant from our research model presented in Chapter 6. This factor reflects both the nature and intensity of the aid provided by the top management to the project manager and project team when accomplishing their duties on the particular project. The flexible and adequate access to organizational resources, namely operational supports from HR and Finance, is considered as a core precondition for effectively executing the project activities. That can hardly be available without accurate and timely response and support from the top management of the project-executing organization.

Figure 32: Short-Term Management Realignment Process: Project Management

In the U.N. integrated project management framework, evidently, top management support, staff's commitment, competency of the management contribute directly to the overall effectiveness of U.N. integrated management framework, while the others in Table 62 have the indirect effect. Since this study did not include integrated change management framework nevertheless, we believe there must be a strong relationship with change progress and the establishment of enterprise architecture for overall performance improvement (Figure 32).

Items	PM1F	PM2F	PM4F	Effect on Integrated Management Framework
	Project Management Compentency	Organization Environment	Project Efficiency	
To communicate at multiple levels	1	1T	0	Indirect
To deal with ambiguity	1	1T	0	Indirect
To coordinate team works and opinions	1	1T	0	Indirect
With effective leadership	1	1T	0	Indirect
Commitment to the project success	0	1	1T	Direct
Top management support	0	1	1T	Direct
functional/operational manager support	0	1	1T	Direct
With right competence in project management	0	1	1T	Direct
With self-commitment to the project success	0	1	1T	Direct
Client acceptance	0	1	1T	Direct
Adequate funds/resources	0	0	1	Indirect
Clear goals/objectives	0	0	1	Indirect
Project mission being in line with organization's strategic objectives	0	0	1	Indirect

Table 62: Project Management Framework Mapping

7.7 Integrating UNJIT with Change Management

This research assessed the effectiveness of integration of change management process. Theoretical framework described in the literature review chapter focuses on the thinking about organizational change from the general patterns of change in the organization that affects the organization as a whole, down to various adjustments on the individual staff level, who must make change happen during the actual implementation process (Figure 33). The Managing Change model (Burke, 1988; Burke and Spencer, 1990; Burke *et al.,* 1991, 1993) offers such a perspective. This framework integrates the strengths of the theoretical perspectives presented above and incorporates important issues involved in evaluating the overall effectiveness of the change process. The model consists of the following dimensions of influential factors:

1. Individual response to change: concerning the nature, prevalence, and utility of resistance to change. This study identified a number of substantial concerns, such as lacking freedom of choice about change usually provokes more resistance than change itself and managing resistance to change are harder than managing apathy about change.
2. The general nature of change: concerning whether effective large system change is evolutionary or revolutionary in nature and the characteristic patterns that typify change efforts in organizations. A number of significant concerns were identified, for example, the effective organizational change would require certain critical and dramatic steps or leaps' rather than smooth incremental ones as well as despite differences in organizational specifics, certain clear patterns typify all change efforts.
3. Planning change: concerning the causes of change in organizations, articulation of the vision, how to get from the present to the future, and barriers to effective transitions. Managing the people side of change: concerning how, when and how much to communicate about change within the organization and psychological issues related to transition. This study identified several significant concerns in:
    a. The articulation of the organization's future state by its leaders is one of the most important aspects of a successful change effort.
    b. The planning of change should be done by a small and knowledgeable group that communicates its plans on completion of this task.

c. '*Protect one's territory*,' both individual and group are usually the greatest obstacles to systemic change.
d. The first question asked by most people about organizational change concerns the general nature of the future state.
e. Organizational change is typically a response to external environmental pressures rather than internal management initiatives.

4. Managing the people side of change: concerning how, when and how much to communicate about change within the organization and psychological issues related to transition. The most difficult aspect of any change effort is the determination of the vision for the future state. In any change effort, communicating what will remain the same is as important as communicating what will be different.
5. Managing the organizational side of change: concerning the design and structural issues of systemic and long-term change efforts. In U.N. organizations, they have main concerns in the reduction of restraints or barriers to the achievement of the end state is more effective than increased pressure toward that end state. Most of the staff members share the common view in the modifications of the organization's structure would help the promotion of changes. Also, the more staff members of an organization are involved in planning the change, the more they will be committed to the change effort.
6. Evaluating the change effort: concerning the effectiveness of change efforts. This study identified a significant indication from this factor dimension, i.e. complaints about the change effort would often be a sign of progress.

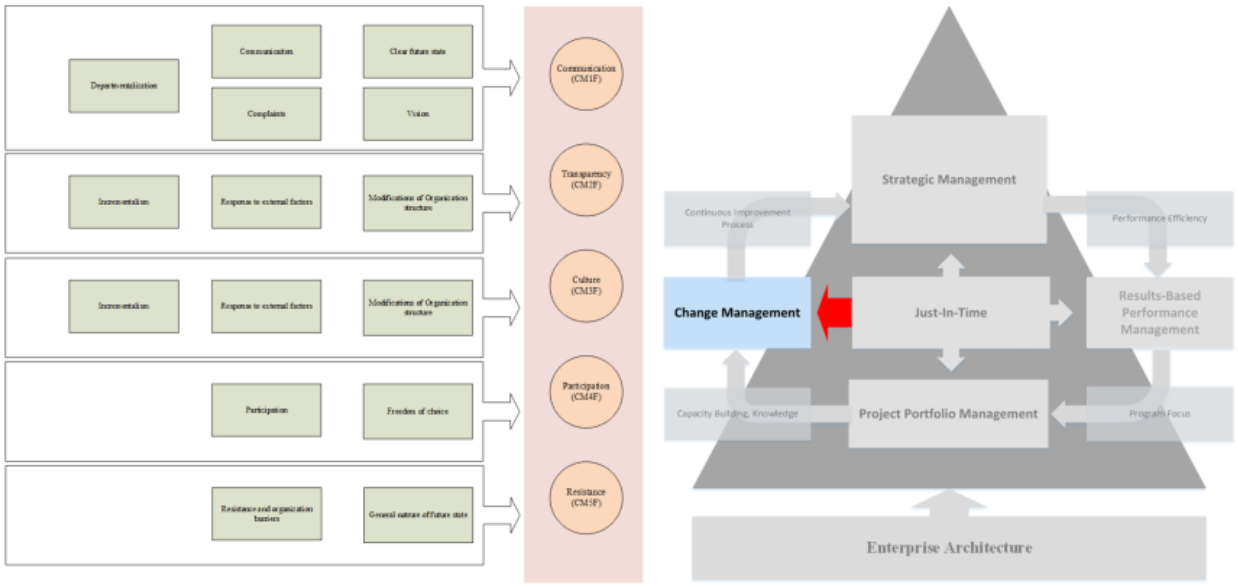


Figure 33: Integrating UNJIT with Change Management

Taken any alone, however, do not provide a comprehensive or integrated understanding of the organizational change process that is useful for managers who find themselves in the position of planning or implementing change effectively (Figure 34).

Figure 34: Short-Term Management Realignment Process: Change Management

Conclusively, this study realized the importance of managing changing as pervasive part of U.N. organizations' '*lives*.' Especially, recent developments in the global economy have catapulted this fact to the forefront of management concerns as well. Catalyzed by technological breakthroughs in distribution, information, and communication systems, we are moving rapidly

towards the world in which the geopolitical boundaries are fading. U.N. organizations are immersed in a virtual cyclone of change as we strive to adapt to the ever-increasing demands of global society and our member-states. Due to its complex nature, this study did not assess the integration of this theoretical framework with other management models. However, we did assess the overall effect though both EFA and CFA confirm the good model fit, which already presented in Chapter 6.

7.8 Integrating UNJIT with Enterprise Architecture

In Chapter 3, this study assesses the model fit between enterprise architecture and business strategy. Evidently, both business strategy and IT strategy should take part with the strategy in Change Management, which will further inter-connected with Performance Management program to ensure performance gains from such integration and increase maturity level in line with U.N. organizations' lifecycle in various dimensions. Project portfolio management is playing a crucial implementation role across organizational divisions for, eventually, maximizing the outcome value and, meanwhile, minimizing the overheads in operational level, means cost reduction.

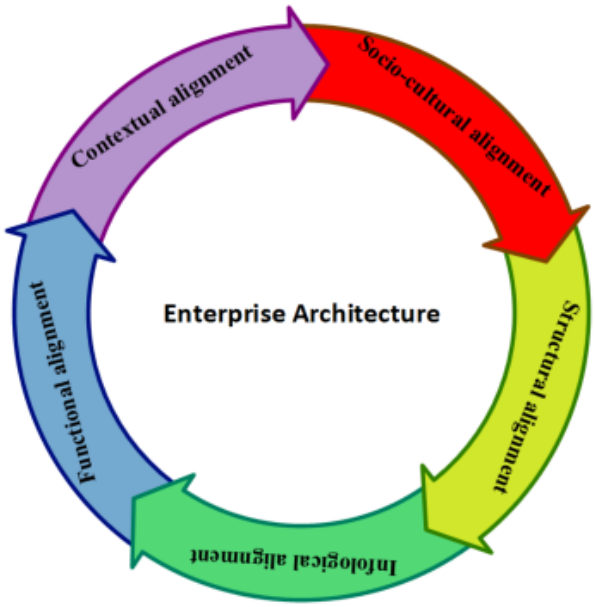


Figure 35: Short-Term Management Realignment Process: Enterprise Architecture

The concept of alignment has been articulated in various ways. The MIT enterprise architecture framework (1990) is used as a baseline of JIT framework in this study. The JIT model

defines the enterprise architecture in five core areas. They are 1) the area of goals, objectives, and values, 2) the area of enterprise activities and their management, 3) the area of decisional rights and responsibilities, 4) the area of primary stakeholders and lastly, 5) the area of information systems and the corresponding IT. The resources together define the information infrastructure of U.N. organizations. The alignments used to explain the concept of interest areas (Figure 36) are

1. Socio-cultural alignment: Socio-cultural alignment is reflected in the harmonious nature of relationships between the areas of information systems and the areas of goals, objectives, and values. The crucial assumption here is that information and knowledge is the glue that holds business and social community together (Magoulas and Pessi, 1998.) This alignment is one of key alignment can reflect United Nations's value to global communities. Zachman does not provide any alignment; TOGAF has offered poor alignment. Based on the assessment GERAM and E2AF are best fit to UN's EA model.
2. Functional alignment: Functional alignment is a state of harmonious relationships between the area of information systems and the area of activities and processes. The fundamental assumption here is that information and knowledge are critical and in many cases strategic resources (Magoulas and Pessi, 1998.) The dimension of functional alignment ultimately boils down to issues of coordinated development, i.e. how the development of the information systems has been synchronized with the development of enterprise processes. The soundness of functional alignment should, therefore, be based on process effectiveness; support, flexibility, inter-dependency, quality improvement, the degree of required coordination, the extent of required synchronization and economy. Zachman does not define the alignment; TOGAF has offered poor access to alignment. E2AF is the best fit from a functional perspective.
3. Structural alignment: Structural alignment defines and integrates the area of information systems with the field of power, i.e. sources of authorities and responsibilities. The crucial assumption here is that information and knowledge are significant sources of authority (Magoulas and Pessi, 1998.) Therefore, the concept of '*Information Politics*' used by Davenport (1997) reflects the very same issues as structural alignment. In any case, structural alignment concerns the harmonious relationships between the structure of power and the information systems. The structure of information flows should map the boundaries of responsibilities. Unclear, complex and incomprehensible information structures lead to

loss of manageability. There is a broad consensus regarding the various models that promote or inhibit the structural alignment. Among the more commonly referenced are a Business monarchy, IT-utopia, federalism, feudalism, dualism, and anarchism (Davenport, 1997; Ross, Weill and Robertson, 2006; Boddy, 2009.) E2AF is most suitable for U.N. EA model from this perspective.

4. Infological alignment: Infological alignment reflects the harmonious relationships between the area of information systems and the area of the individual stakeholders. The underlying assumption, in this case, is that information knowledge is communicated through our language (Langefors, 1986.) Iconological alignment expresses the requisites for the locality, comprehensibility, and meaningfulness. Cognitive distance, working styles, decision styles, communicative styles, and perspectives can be seen as significant factors for the actors' willingness to use and accept the information systems. Zachman does not provide any alignment; TOGAF has offered poor alignment. E2AF is most suitable for UN's EA model from this perspective.
5. Contextual alignment: Contextual alignment concerns the harmonious relationships between the enterprise as a whole, its information systems, and its external environment. The concerned relationships have only an indirect impact on the information systems and the different areas of interests. These areas may at first glance seem unrelated, but since the flow of information permeates the organization, it is necessary to be mindful of the subtle manner in which different areas influence one another. Contextual alignment also includes the enterprise's boundaries as well as its interaction with its environment (Tichy, 1983.) Although it may be difficult (or even impossible) for the organization to affect any change beyond the limits of its enterprise areas, one should be mindful of opportunities and impediments as they are usually the impetus for organizational change. Poor alignment patterns have been viewed in TOGAF and Zachman. GERAM and E2AF are the best fit to UN's EA model from a contextual alignment perspective.

In summary, the analysis of the contextual dimension shows that three of the investigated approaches – TOGAF, GERAM, and E2AF – provide comprehensive, albeit somewhat simplistic, support regarding contextual alignment. As the results show, there is no perfect fit to meeting U.N.

context. However, all three models are enough, as a starting point, to meeting the research goal of this dissertation.

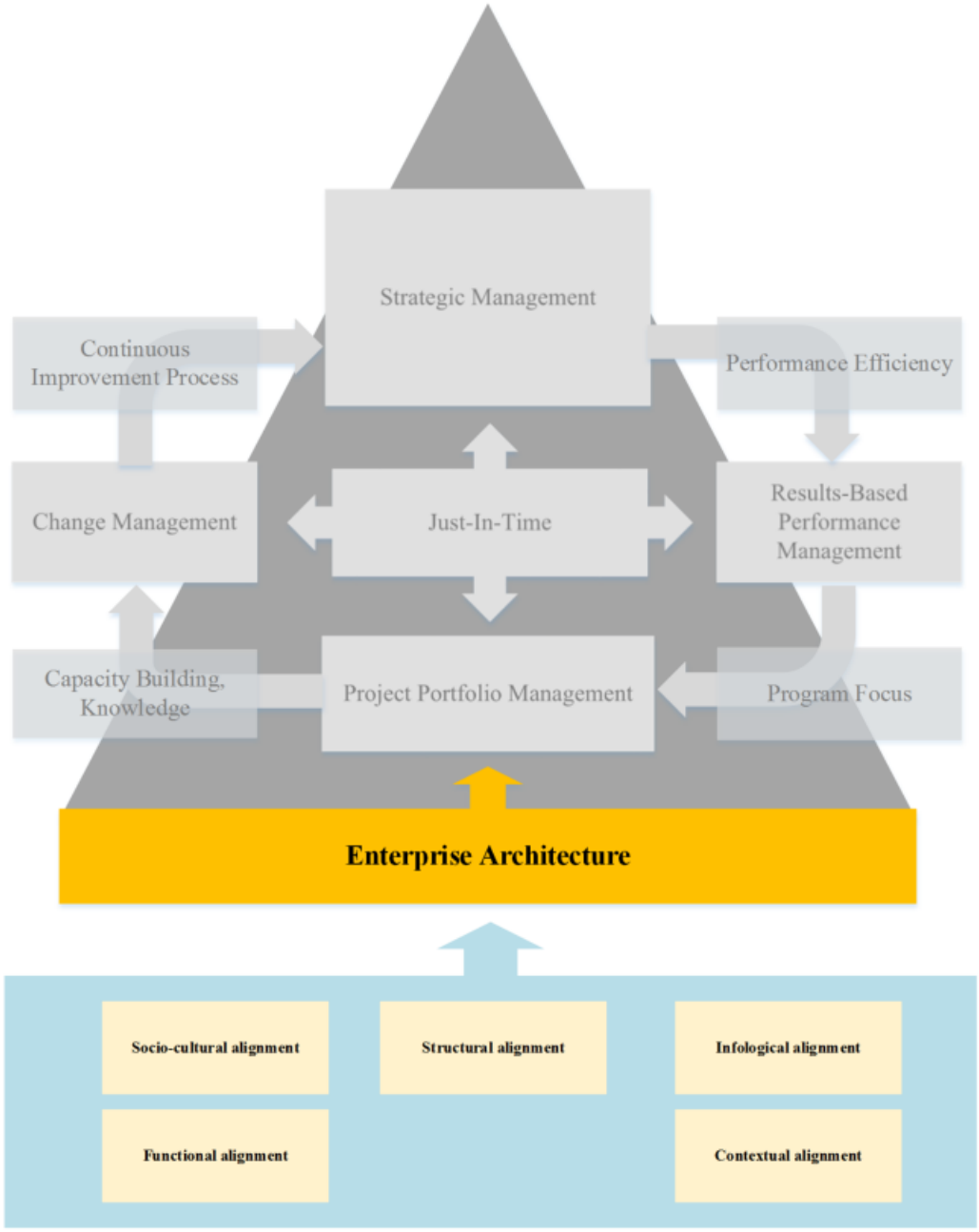


Figure 36: Integrating UNJIT with Enterprise Architecture

7.9 Synthesis of UNJIT Framework

In summary, these UNJIT principles discussed above are worthwhile applying to U.N. organizations. In this context, recommendations are made in this study for the role that the U.N. organizations can take in UNJIT implementation. Based on the results of this study, reduction of

power as well bureaucratic influence and continuous adjustment including both short-term management alignment and long-term realignment processes for improvement are the necessary driving forces in the initial stages of UNJIT implementation. U.N. governing bodies can lend their support to the organizations that are intent and committed to implementing the UNJIT system. The following recommendations are for the U.N. organizations to implement UNJIT in practice:

1. Planning and Development: from the results of U.N. integrated management model, all management components share a number of common factors in the model. For example, 'future state' is one of common concern in both change management and strategic management. That means U.N. staff have a common interest about their future and organization's future in global society. The main reason they have those fears is that some reasons are attributed to lack of transparency and lack of staff participation in strategic planning, decision and choice process. Another factor explains the fact that the results show U.N. staff have a lack of freedom of choice in the strategic management process. Nevertheless, in both strategic management and project management (strategic implementation) demonstrate clear objective and strategic objectives alignment are critical to business success. The results also indicate leadership is essential to make vision clear to all staff and encourage participation through smooth communication is also important.
2. Resources and Capacity Building: In performance management and project management components, the results show the importance of training, learning, and continuous education to staff. Competency and coordination skills are some of the key factors to ensure a project success. Other than those, clear roles and responsibilities are required to ensure proper accountability structure being in programme delivery.
3. Power and Politics: the main negative influence to the effect of U.N. strategic planning, development, and implementation is the power, which is driven by both internal and external forces. The reduction or control of such forces will help improve over programme performance as a whole.
4. Environment and Culture: Departmentalization is one of the main challenges in gaining efficiency therefore often 'organization re-structure' was proposed to reduce such territory building. Nevertheless, the barriers and beliefs are still presenting during the strategic development process. Therefore, in past JIT studies, top management support is a critical

factor to regain the efficiency and effectiveness and to enhance the productivity in an organization.

5. Reward and recognization in organizations that have experimented with JIT implementation: Training can be offered to workers in JIT to encourage the more widespread use of management components.
6. Simplify the bureaucratic process for legislative controls to ensure that there is no delay in the commencement of programme works arising from insufficient submission documents. Promote the collaboration and cooperation between different bureaus to expedite the approval process.

Based on the results of this study relating to integrated management model and UNJIT, and an examination of the U.N. context, it can be concluded that there is the potential for UNJIT application to address the efficiency and effectiveness issues in U.N. organizations. The U.N. governing body and the decision makers should recognize the importance of UNJIT and provide appropriate training and other assistance to facilitate the adoption of UNJIT in the U.N. context.

CHAPTER 8 CONCLUSION

The ultimate goal of this research was to theoretically examine the integration of the multidisciplinary nature of the various management theories and its application within the current practices of the U.N. organization. This goal was driven by the ever-increasing need for the U.N. to establish a model of transformation pressured by recent resolution for change. This research passed through the broad, complex, and diverse terrain of management theories where opportunities for their integration were explored culminating into an integrated conceptual model. Along the way, and due to the fact that this research is centered on the U.N. context, a detailed review of the U.N. and associated drivers for transformation and change were elaborated. The theoretical management models were first validated against the U.N. context resulting in an Integrate U.N. Model for transition and change. Finally, a framework was worked out to operationalize this model allowing U.N. agencies to implement.

The results of this research revealed the potential (and evident advantages) of integration providing a lean management system where U.N. organizations can achieve its business objectives and execute its functions optimally as a coherent and harmonized whole. Particularly, this integrated management model has an all-inclusive focus on the needs of the organization's internal as well as external stakeholders, who are also the sources of various influences and pressures.

This study argues that a U.N. organization should aim to deliver its missions and services in a consistent quality while simultaneously nurture the global society, and to protect the environment as the SDGs set for 2030. To that effect, the emphasis is on the process of transition and change as the U.N organizations' mission and services evolve – hence the just-in-time framework proposed herein. Universal management principles must be understood and applied to the whole organization and its interactions with stakeholders to drive an integrated management approach. As such, this research claims that just an integrated effort in management alone will only create limited value to U.N. organizations. Only with the application of a Just-In-Time framework, and by cutting extra (fat) redundancy, eliminating waste in resources and reducing operational costs, and, at the same time, strengthen efficiency (getting rid of lead time) in time management would bring the desired outcomes together.

8.1 Findings of Study

This study tested independently, and the integrated the management models for strategic management, results-based management (U.N. performance management) and project management, and argue that, by doing so, will allow U.N. organizations achieve optimal performance as they transition and change towards the U.N. development goals. The model fit results of this research are reported in Chapter 6. SEM assessment of the relationships was conducted in four phases. The first phase tested the management models constructs independently and then in the U.N. context, while the second phase established an integrated research model using a factor reduction approach (via EFA). The third phase examined the overall effect of integration in the research model and the restricted models. Finally, in phase 4 we tested the mediation effect among integrated factors to confirm that the final model meets our propositions.

The findings, presented in chapter 6.6.2, argued that during the past decades, U.N. had placed enormous efforts on management reform through the realization of strategic planning, the theory of change, and result-based management. Nevertheless, the achieved results continue to be limited. The complexity of U.N. organizations, the range of the corresponding institutional environment, and the discussed implications throughout this study provided this research with a platform to contribute to the body of knowledge thereby enhancing our understanding of strategic management, change management, project management, and corporate performance theories, for the U.N. context.

8.1.1 the UNIMM

U.N. organizations make significant efforts to promote their relevance in a global society as well as show added-value to meet the increasing expectations of member states. Accordingly, this study answers two main questions raised in chapter one, which form the grounds for this dissertation:

1. What are the effects of political pressure and institutional gravity influencing the U.N. strategic planning and development process?

Through the elaboration of the JIT support system mediated by the results-based management, it would help U.N. organizations to refocus their programme's implementation. This study confirmed, statistically, the effects of both external and internal factors to the application of U.N.'s strategic planning and Development.

2. What is the most suitable management model to meet U.N.'s programme for reform and programme priority?

   Statistically, this research showed that it is possible to align management practices into an integrated model. During this integration activity, we found that various management theories are using duplicate factors in change management, strategic planning, results-based management, and project management trying to interpret the same effect in the strategic planning process, differently. Often, some reinvent-the-wheel efforts found in various official guides, manuals, and handbooks in various U.N. agencies that further distress strategic focus and often lead to promoting bureaucracy in the organization and across U.N. wide programmes. Strategic planning and development also require the implementation of project portfolio management as a vehicle for their realizations that the results will, theoretically, link to the results-based management framework for monitoring and evaluation, and that later also engage further change efforts for incremental improvement. Thus, instead of continuing this piece-meal approach, an integrated Just-In-Time management model was formulated.

8.1.2 Political influence and change in the U.N. context

Many differences exist among organizations, but power politics plays a general role in all sectors. It is a misconception that only public bodies are politically driven. In fact, each organization is surrounded by power relations. The political school of thought makes a distinction between micro and macro politics that this school is suitably used to explain U.N. political environment (chapter two). Micro-politics relate to political pressures within the organization, while macro-politics defines the use of power by the organization. Both of them form the institutional pressure factor in the research model. There are enduring differences among the members of this coalition concerning standards and values, beliefs, interests, and view of reality in the organization. Especially in U.N., the main decisions concern the allocation of scarce resources

immediately result in conflicting interest in the dynamics of the organization, and that power becomes the most valuable asset. However, the main concern regarding the power between U.N. governing body and top management in the U.N. Secretariat is, often triggers debates, in who can make the final call for programme/mission priority and resources allocation. Therefore, that phenomenon already signposts that strategy is not the work of a single architect or a similar strategy team. According to the political management school of thought, any formulated strategy is closely related to the composition of the management team. From that view, U.N. organizations fundamentally are different from both the public sector and private sector. On the one hand, U.N. is facing the same institutional pressure as the public sector, however, in multiple and conflicting goals, more rules, regulations, and constraint, and where the decision-making process is lengthy and complicated. The main difference is that the U.N. does not have clear accountability associated with the management team. Instead, the so-called accountability is often manifested as political wrestling or horse-trading among member states. On the other hand, the U.N. does not behave like the private sector, as in engaging in revenue-driven activities. Nevertheless, due to the fact that the U.N. today also suffers the same challenges in funds availability and sustainability to its regular programme, U.N. organizations have begun to employ competitive strategies and engage in in-kind fund generating activities, mandated by its member states, to reduce the budgetary gap of the regular programme.

However, from the literature review of discussed models and approaches, there is no doubt that the forces, drivers, and assumptions behind the organizational change are numerous and varied. Due to the impacts of significant contributions shortage to the regular program budget, some U.N. organizations favors more market-oriented approaches and have started to engage in the revenue-based partnership program. By doing so, the U.N. faces more competitions from NGOs, and more often criticism from the member-states due to competing for the business interest with their government-funded organizations increasingly. Consequently, all these global changes have stimulated much debate in U.N. about its direction and evolution.

Accordingly, we have compiled fifteen facts that would significantly impact the current change process, the theory of change, in the U.N.

1. Staff members are not encouraged to engage in discussions about change and this often provokes more resistance from the Secretary.
2. Addressing resistance to change should include managing apathy about change.
3. Effective organizational change requires smooth incremental change steps.
4. Certain clear and unique patterns characterize change efforts in U.N. organizations.
5. The articulation of an organization's future state by U.N. top management is one of the most important aspects of a successful change effort.
6. Concern from staff that planning change is solely managed by a small group that communicates its plans after completion.
7. Departmentalism and territory protection are usually the greatest obstacles to change.
8. The first question asked by most people about organizational change concerns the general nature of the future state.
9. Organizational change is typically a response to external environmental pressures.
10. The most difficult aspect of any change effort is the determination of the vision for the future state.
11. In any change effort, it is critical to communicate what will remain the same and what will be different.
12. In managing change, the reduction of restraints or barriers to the achievement of the end state is more effective than increased pressure toward that end state.
13. A change effort routinely should begin with modifications of the organization's structure. Even though in the common practice it should be opposite, in the U.N. context, updating organization structure is an important step for change.
14. The more staff members are involved in the planning process of the change, the more they will be committed to the change effort.
15. Last but not the least, there is a significant concern about using complaints as an indicator to measure the change effort for a sign of progress.

Thus, any or some of these concerns mentioned above taken alone do not provide a comprehensive view of the change process in the United Nations effectively.

8.1.3 Integration effects

The results of our study showed a significant as well as positive relationship between strategic planning and strategic development. The same model also confirmed that the influence of political pressure and environmental factors could negatively impact on the performance of strategic planning and development process in the U.N. While establishing the performance management constructs, this research adopted the model used in UNDP, which was used to assess the performance effect of U.N. programme on the country-level. Results show that capacity, program focus, performance evaluation, and accountability factors have a significant influence on performance efficiency, which also has a direct and positive relationship with strategic development from Bailey's (2000) management theory. The integration effect provides strong evidence that strategic management must engage performance management to achieve optimal results. This conclusion is in line with the discussions in chapter four. The project portfolio management construct found in strategic management model plays a critical role in strategic implementation; a means to realize strategic decision to achieve the objectives at the end of the whole management process.

The adopted research model was based on multiple project management theories, discussed in chapter three. After validating the model fit using EFA and CFA methodologies, the results show that the U.N. organizational environment, project manager competency, and project responsibility (governance structure) have significant as well as positive relationships to overall project efficiency, which has also indirectly influenced from strategic development, and mediated by the effect of performance efficiency. Lastly, the integration effect of the research model was tested against three restricted models and confirm that it is the best model comparing to all other restricted models in this study.

Thus, by taking a contingency perspective to investigate the direct association between Strategic planning & development (political pressure, institutional pressure, strategic planning, and strategic development), results-based management (evaluation and accountability, programme focus, capacity, and performance efficiency) and project management, this research extended the current understanding of the individual impacts of an overall corporate performance in the United Nations. It was found that both political pressure and institutional pressure have negatively impacted the effectiveness of strategic management. However, it was also found that higher levels of program focus, qualified capacity, proper evaluation, clear accountability have a positive

association with performance efficiency, and qualified project manager (competency), clear project responsibility, and a mature project environment will improve overall project efficiency. These findings extend and contribute to the current knowledge in the domains of organizational theory and operations management.

Our results of research also contribute to and expand management literature, by demonstrating the association amongst, project development, performance efficiency, and project efficiency. This research examines the indirect effect between strategic planning & development and project portfolio management, mediated by the results-based management. The result shows a significant relation between both statistically, with proven mediation effects. Also, by comparing three restricted models, the findings confirm when all three management components are integrated, will the optimal effect be measured. Thus, any other combination will not support the same results. By doing so, an attempt is made to strengthen the understanding of the integration effect in multidisciplinary management theories literature.

8.1.4 Discussion of integration dimensions and factors

This research established the integration influences between strategic development, performance efficiency, and project efficiency. This is vital, whereby with detailed systematic analysis, allows for transparency of the entire organizational transition and change initiatives and associated processes. This will support the strategic development process and positively influence performance efficiency as a whole. Consequently, integration will be subject to the extent of the implementation of monitoring & reporting system and involve staff in clear follow-up procedure, continual learning, clear role and responsibilities, sustainable resources, management and attractive reward system. Performance efficiency will enable project efficiency as long as there are clear objective and goals and adequate resources (see Figure 37).

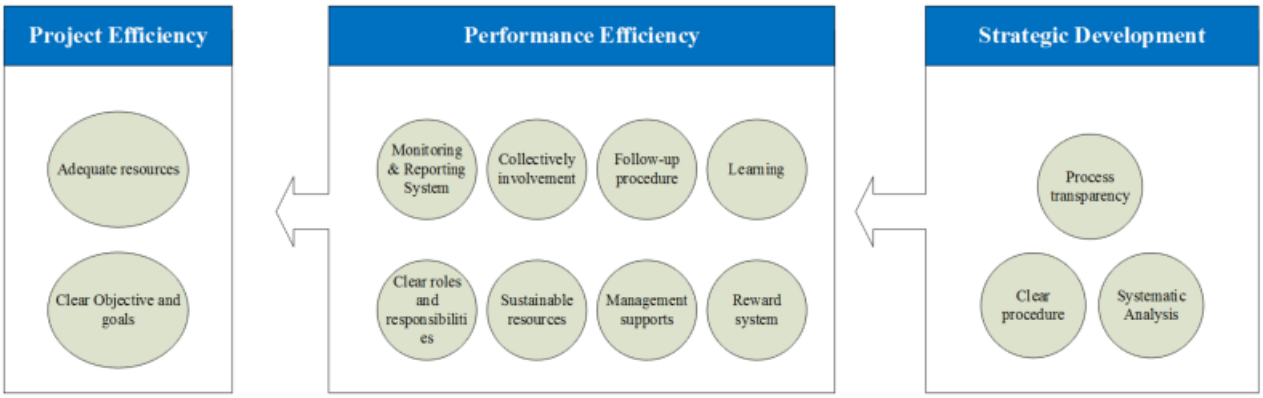


Figure 37: Integration dimensions and factors

8.1.5 U.N. Just-in-Time notion

According to the discussions from the UNIMM in chapter 6 and chapter 7, the application of UNJIT would bring tremendous organizational performance through the exertions of short-term management realignment process (elimination of waste) and longer-term integration of management frameworks (streamline of management process). However, due to vast resources and efforts required as well as committed for such effect in place, it is suggestive to be carried out in an incremental adjustment approach, which would be to offer experimental trials among those larger, better endowed, and well self-funded organizations that are likely to adopt UNJIT as a long-term strategy. In the occasion that a decision is made to proceed with the UNJIT philosophy, the implementation requires careful consideration and planning with further in-depth study required.

8.2 Limitations of Study

The supply-chain JIT (narrow definition) has its limitation, which solely focuses on building a zero-fat manufacturing process in the production industry. However, as more often understood, reduction in inefficiency is not only a production system matter of an organization. Thus, this research contributes and expands the theory by applying the existing framework to a broad definition of JIT, a theoretical approach to U.N. management system. The expanded JIT theory can also be integrated with the results-based management as producing the necessary outputs, with the required quality, in the necessary quantities, at the last safe moment. It also benefits a U.N. organization managing its resources and allocates them very easily as well as at the

same time being in line with the strategic goals of the business. This model will also not only apply to supply-chain industries but also potentially to management systems in other sectors.

In the management studies, many authors have attempted to articulate what represents theoretical contribution. However, a lack of agreement on what constitutes theory has made it challenging for researchers to develop and contribute to the theory in management research. Clearly, that was the same challenge this research faced. In this study, we assess strategic schools of thought, performance management approaches, project management methodologies, and change management practice in the United Nations. The findings confirmed there is no consistency in definition, process, approach, construct, perspective or view in each management discipline that obviously lead to a challenge to build a joint research ground and to establish a consistent research model to study the integration effect in multidisciplinary management theories. This heterogeneous field of study, typically with many stakeholders such like that in the U.N. context, not only borrows from a variety of disciplines but also includes the practitioner's perspective (from U.N. staff) as well. The mix of different perspective and background could result in a misperception of what is knowledge contribution. That is more evident in the context of this research, which is attempting to establish a link amongst strategy management, performance management, change management, and project management theories that originality establishes to reveal something new revelatory or help develop or add to existing knowledge (incremental).

Also, various limitations may exist in this research. Sample composition, which is one of the most frequently cited threats to external validity, is not considered a limitation to the results. Given that the regional representative and gender equality are some of U.N. strict human resource policies, usually, U.N. by itself is generalizable across populations. As discussed in previous chapters, the purpose of this study is to generalize the significance of path coefficients in the integration effect rather than actual parameter estimates. Therefore, the use of U.N. management staff subjects is meeting validity requirements in this research. Accordingly, the summary of primary limitations of this study are thereby deliberated as following:

1. The integral influence in multidimensionality and multidisciplinary management theories were rarely explored in the management disciplinary. In this study, although Cronbach's alpha, variance extracted, construct reliability, and model fit indices of factor analyses

indicate acceptable degrees of construct validity and reliability of the instruments, examination of the correlation matrix reveals mixed results. Nevertheless, it indicates some discriminant validity issues in the constructs (see Table 44). The source of matters was because three management theories commonly use a set of similar factors to assess the extent of the certain effect. However, some common (redundant) variables in the research model show more strongly connection with another factor than the factor in their model.

2. This research report has so far highlighted some weaknesses in the reliability and validity (see Table 43). Because a quantitative methodology was used, it was not possible fully to explore issues that may have negatively affected on the scale's psychometric properties. For example, staff may specialize in one management such as project management, but this study asked all participants to answer all four management practices in their organization. That some disciplines, such as strategic planning or change management, some participants may not have enough institutional experience or participation in the planning process, therefore, that unreliable answers could also have influenced to the validity and reliability.
3. Due to the serious concern of organization reputation, this study could not formally conduct a qualitative analysis through interviewing senior executives in some U.N. organizations. However, this research could perhaps assume a qualitative nature and might probe some senior management's views. For example, it is valuable to understand how project implementation role in strategic planning, whether the interdependent relations between results-based performance, such as KPIs, and organization change or how to link performance measurements to improve the strategic planning process through the mediation of change and so on. Interviews and panel discussions with other U.N. organizations staff members about environmental pressures that may also contribute this study to comprehend more about how those items behave in the research model. Similarly, interviews with U.N. staff from different organizations may highlight new ideas about the relationship between constructs, and in the end, to improve the multidisciplinary research as a whole. Qualitative data may also have made it possible to identify new items to include in a baseline model as certain U.N. organizations experienced them.
4. Regarding data analysis, it is a best practice to compare the factor analyses of different U.N. organizations either via a coefficient of congruence or through CFA and path analysis. These techniques would have enabled a more rigorous assessment of the scale's validity.

These calculations were not performed, partly because the subgroups were too small to conduct factor analyses on them separately.

5. Regarding the sample size, although the determination of appropriate sample size is a critical issue in SEM, unfortunately, there is no consensus in the literature regarding what would be the proper sample size for SEM. Some evidence exists that simple SEM models could be meaningfully tested even if the sample size is quite small (Marsh and Hau, 1999), but usually, N = 100–150 is considered the minimum sample size for conducting SEM (Tabachnick and Fidell, 2001). Some researchers consider an even larger sample size for SEM, for example, N = 200 (Kline, 2005). Simulation studies show that with normally distributed indicator variables and no missing data, a reasonable sample size for a simple CFA model is about N = 150 (Muthén and Muthén, 2002). For multi-group modeling, the rule of thumb is 100 cases/observations per group (Kline, 2005). The sample size is often considered in light of the number of observed variables. For normally distributed data, Bentler and Chou (1987) suggest a ratio as low as 5 cases per variable would be sufficient when latent variables have multiple indicators. A widely accepted rule of thumb is 10 cases/observations per indicator variable in setting a lower bound of an adequate sample size (Nunnally, 1967). Based on above recommendations, it is recommended, by using the lowest suggest ratio 1:5 observations, we should have 395 observations (project management has 25 indicator variables; result-based management has 30 indicator variables; strategic planning & development has 24 variables) to our research model. Therefore, even we have enough samples to conduct the SEM but the observations might not enough to interpret correctly the model we proposed.

8.3 Implications for Practitioners and Researchers

From the findings just discussed, several implications followed and resulted in the following observations and suggestions.

U.N. senior management should not only emphasis on the efforts of strategic planning and development process but also the implementation monitoring as well as reporting. Also, clearly, our findings clearly show both political and institutional pressure have a tremendous negative impact during the strategic formulation period. However, the results of this study also show that

putting efforts on clear organization's objectives and procedure, smooth improvement process in place, transparency with the encouragement of staff participation, well systematic (environmental) analysis will significantly reduce the negative impact from political side and resistance of staff. At the same time, those factors have a direct and significant influence on corporate performance as a whole.

To U.N. performance management team, emphasizing learning and accumulating knowledge over performance monitoring, reporting and developing support systems to foster a culture of performance are absolutely essential to the success of performance management. When the culture of performance can be developed, then the main purpose of results-based management will not be lost that involves knowledge management in the first place that is in line with the school of knowledge-based view. Resource availability commitments from the top management, especially to those skilled as well as well-trained staff, is crucial to ensure development sustainability. Senior managers have a major role in nurturing this climate of results through leadership and demonstrating that results and results management do matter. From this research, this implication from the findings also identified 'reward system' is also playing an important role in U.N. corporate performance. Consequently, it is evident U.N. could implement such mechanism for a better performance in return from programme future. The success of implementing performance efficiency will directly and significantly influence the success of project implementations. On the other hand, without performance management in place, the effect of strategic as well as project implementation will be subject to individual interpretation.

In this study, among all other factors, we identified the competence of project manager is crucial to the successful completion of U.N. project management. Also, the knowledge, skills, personal aims, and personal traits should be considered not only as a vital component of the overall organizational culture but also as an essential factor of the integrity and multi-functionality of the project team. Last but not least, top management support is always critical to all management models in this study. That means senior management's support will be the most common as well as crucial to the success implementation of U.N. integrated management model.

To Researchers, U.N. context was rarely being studied that as discussed even researchers and practitioners often apply views, methodologies, and approaches from private and public sectors

however due to nature of environment difference, those applied management frameworks also often disappeared from the key agenda after several year's efforts. Therefore, a significant effort in understanding U.N. context and its uniqueness in global change climate to deliver mandated Just-in-Time service to especially war and nature disaster zones is absolutely an urgent matter to researchers. The next section elaborates the future research with recommendations.

8.4 Recommendations for Future Research

This research makes significant implications for future research in multidimensional phenomena and integration effects in the management theories, in the context of the United Nations. That could attract more attention on an integration view of strategic thinking, cohesive methodology of project management practices as well as assimilated results-based performance management research from within the U.N. system. Eventually, the overall performance will meet member states' Just-In-Time requirements and expectations. This research articulates a theoretical foundation of the strategic management process, U.N. results-based management, and the strategic implementation means, project management, building and provides theoretical links among them. We also confirmed the relationships among critical factors and demonstrated that a theoretical model, Just-In-Time production system, can be adopted in the research design, and which we deem necessary for U.N. organizations. As these three management theories, after integrating them, clearly, there are redundant factors in the constructs, such as clear procedure, clear objectives and goals, clear roles and responsibilities, management supports, and adequate resources. A future integrated management could consider removing that mentioned redundancy for a '*clean*' construct for further researches.

Also, further research could be of the integration effect of change management that often see the management such strategic management as well as performance management have also management items or process related to change management. It is commonly agreed a success strategy cannot be realized without keeping organization change in terms of re-position of the organization in the future state. Also, integrating strategic implementation with enterprise architecture is often used as a means to gain efficiency and effectiveness of an organization.

Last but not least, UNJIT concept is first time applied in the U.N. context as well as its integrated management framework. There is no doubt, a further in-depth study in the context and its application is required, especially to critical in-time services in the field and mission.

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APPENDICES

Appendix A Models of Change

I. The planned approach – Kurt Lewin's model of change (1951)

The planned approach to organizational change emerged through the work of Kurt Lewin (1951) relating to group decision-making, implementation, and social change. For Lewin (1958), a major concern was the issue of team conduct. He observed that the behavior of individuals differed from group to group. Thus, in an attempt to understand the uniformity of some groups' behavior against others, he was able to argue that people may come to a group with very different reasons, but if they share a common objective, they are more likely to act together to achieve it. He maintained that there was a need to change group conduct so that it would not revert to the old level within a short time. In support of Lewin's theory, Burnes (2004) suggested that 'only by resolving social conflict, whether it be religious, racial, marital or industrial, could the human condition be improved.' Hence, Lewin's theories were premised on the fact that planned change, through learning, would enable individuals to understand and to reframe their views on how to resolve social conflict (Table 1 below).

Model	Description	Researches
The planned approach to organizational change – Kurt Lewin's model of change	1. Group decision-making, implementation, and social change; 2. Through learning, would enable individuals to understand and reframe their views; 3. Organizations that are implementing change management should encourage employees to distance from their comfort zones; 4. All relevant stakeholders are given the opportunity to be engaged in decision-making and problem-solving in a collaborative manner; 5. Employees should receive appropriate recognition for changes in behavior	Kurt Lewin (1951) Burnes (2004) Branch (2002) Harper (2001)

Table 63: The Planned Approach Summary

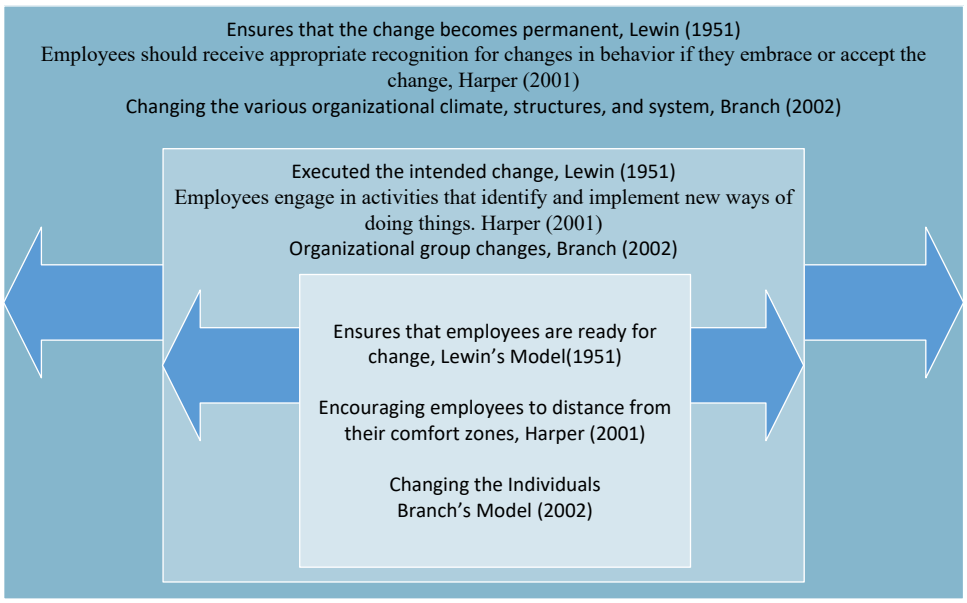

Figure 38: Lewin (1951), Harper (2001), and Branch (2002) Change Model

Furthermore, within the context of organizational change, several criticisms were made against Lewin's planned approach to change listed in Table 2. Review this model in the U.N. context, the biggest hurdle to U.N. Organizations is how to address the 'uncertainty,' which is one of the core issue resulting in resistance in the U.N. Without taking a consideration from the bottom view instead of watching from the top that often increases discouragement in employees, e.g. question like why me, as changing in leadership is also one of the critical factors in a successful change. Moreover, change by itself is not a project instead it is an open-ended process, which must be in line with the strategies of change to make it meaningful for organizational change (see Figure 38).

Model	Critique	Researcher
The planned approach to organizational change – Kurt Lewin's model of change	The planned approach is too simplistic and mechanistic in the present climate of organizational change. Critics point out that organizational change is a continuous and open-ended process	Dawson (1994); Pettigrew (1990a), (1990b); Stacey (1993); Wilson (1992)
	This approach is only beneficial when incremental change is introduced in an organization and has relevance only for isolated change projects.	Dunphy and Stace (1992, 1993); Harris (1985); Miller and Friesen (1984)

	Ignores the role of power and politics in organizations and the nature of conflict existent in organizational life	Dawson (1994); Kanter, Stein and Jick (1992); Wilson (1992)
	This approach advocates a top-down, management-driven approach to change and ignores situations requiring bottom-up change	Dawson (1994); Kanter, Stein and Jick (1992); Wilson (1992)
	Like anxiety and risks associated with the uncertainty that can lead to unconstructive rather than constructive behavior on the part of employees	Argyris (1993)

Table 64: Examples of Criticisms to Lewin's Model of Change (1951)

In summary, Lewin's model seems to be rational, goal and plan oriented to organizational change. However, it does not take into account personal factors that can affect change. Conversely, the social cognitive theory proposes that behavioral change is affected by environmental influences, personal factors, and attributes of the behavior itself. Lewin's model makes rational sense, but the Social Cognitive Theory because it takes into account both external and internal environmental conditions.

The emergent approach to organizational change – Kotter's model of change (1995)

The emergent model of change was the response to criticisms put forth against the planned model of change, discussed above. This approach has been given some different labels, such as continuous improvement or organizational learning (Burnes, 1996a). The model views 'change as driven from the bottom up rather than from the top down, and stresses that change is an open-ended and continuous process of adaptation to changing conditions and circumstances' (Burnes, 1996a). The approach suggests a change be so rapid that it is impossible for senior change initiators to identify effectively, plan and implement the necessary organizational changes (Kanter, Stein and Jick, 1992). Therefore, the responsibility for organizational change has to become increasingly devolved (Wilson, 1992). This approach to change also stresses that change should not be perceived as a series of linear events within a given period, but as a continuous, open-ended process of adaptation to changing circumstances and conditions (Burnes, 1996b; Dawson, 1994). According to Burnes (1996b): 'the emergent approach promotes extensive and in-depth understanding of

strategy, structure, systems, people, style and culture, and how these can function either as sources of inertia that can block change, or, as levers to encourage an effective change process.'

Furthermore, Burnes (1996b) maintained that the success of change should be less dependent on detailed plans and change initiatives. Rather, emphasis should be placed on reaching an understanding of the complexity of the issues concerned with the change and identifying the range of available options. In other words, what Burnes (1996b) was suggesting was that this approach to change should focus more on change readiness and the means of facilitating the proposed change. A specific pre-planned step for each change initiative becomes secondary. Dawson (1994), Wilson (1992), and Mabey and Mayon-White (1993) claimed that the emergent approach to change is associated with learning processes and is not just a method of changing organizational structures and practices. Thus, an organization's ability to learn and adapt may also influence the success or failure of the change management program.

In that there are no set rules for leading and managing change, several proponents of the emergent approach, for example, Kotter (1996) suggested sequences of actions that organizations can adopt (Pettigrew and Whipp, 1993). Kotter's model (1996) advocates eight steps in the change process: 'establishing a sense of urgency; creating the guiding coalition; developing a vision and strategy; communicating the change vision; empowering employees for broad-based action; generating short-term wins; consolidating gains and producing more change; and anchoring new approaches in the culture'. These steps are illustrated in Figure 39 below.

Figure 39: Kotter's 8-step Model of Change (Kotter, J.P., 1996)

According to Burnes (2001), these eight steps were considered to be a process by Kotter and not a checklist. Furthermore, Kotter claimed that most major change efforts consist of a variety of small and medium-sized change projects. He also maintained that the new approach is a result of the assumption that 'change is a continuous, open-minded and unpredictable process of aligning and realigning an organization to its changing environment.' As a consequence of that, the emergent approach to change has become very popular among organizations in the contemporary world because it recognizes the fact that organizations must adapt their internal practices and behaviors to meet changing external conditions (Burnes, 2001).

However, Kotter's model is not devoid of criticism although it has the advantage of being a step-by-step model, which is easy to implement, However, for the model to be successfully implemented, all of the eight stages must be worked through to completion. Skipping even a single step or getting too far ahead without a solid base almost always creates problems. Failing to reinforce earlier stages results in the sense of urgency dissipating, or the guiding coalition breaking up. Without the follow-through which takes place in the final step, the organization may never get to the finish line and make changes stick. Furthermore, the model should not focus on the change itself, but rather the acceptance and preparedness for this change, which makes for easier transitions. Moreover, within the context of organizational change, several other criticisms were made against Kotter's 8-step model, listed in Table 3.

Model	Critique	Researcher
The emergent approach to organizational change – Kotter's model of change	**Rigid approach** Kotter argues that the eight steps should be followed in sequence and that extended overlapping of the steps will compromise success, implying that measures are a requisite of one another. Therefore, not implementing the first step will make it difficult or impossible to apply the subsequent steps.	Burner (1996b) Cummings and Huse (1989); Schein (1985); Burnes and James (1995)

	Some steps are not relevant in some contexts Some transformations do not require nor can go through certain steps. A simple example is the replacement of major software used to process operation or the change of equipment on a manufacturing line. In these cases, the changes are often irreversible, and so Steps seven and eight might not have relevant.	Appelbaum S., Habashy S., Malo J., and Shafiq H. (2012)
	Dealing with difficulties during change management Companies implementing changes face many challenges. Planning changes according to Kotter's framework should limit those obstacles, but the model is not detailed enough to provide help in all scenarios.	Jaros's (2010)
	The difficulties of implementing all of the eight steps	Sidorko (2008); Penrod and Harbor (1998)
	Difficulties encountered in evaluating the level of implementation of the steps, and the challenge of corroborating implementation level with implementation success level	Sidorko (2008); Penrod and Harbor, (1998); Dianis et al. (1997)
	The need for a long follow-up of the change project, to cover all the steps.	Penrod and Harbor, 1998; Betters-reed et al. (2008)

Table 65: Critique of Kotter's Eight-step Model of Change

In summary, Kotter's model which is viewed by many as a simple model to implement in some organizations could fully prepare the employees for change before vision is even adopted, which makes the real transition much easier in the long run. Also, it would appear that there are fewer disadvantages to this model than other models of change. Overall, this model could be the best fit for most organizations because substantial change might be needed for the different divisions of the organization and a step-by-step approach would be most beneficial. However, as stated earlier, the successful implementation of the model is dependent upon the eight steps being worked through in an end-to-end orderly manner and fully completed that is the whole challenge.

The contingency model of change - Dunphy and Stace's model of change (1993)

Expanding upon the three-step model as espoused by Lewin (1951), Dunphy, and Stace (1988, 1992, and 1993) investigated change from an organizational transformation perspective. Within that point of view, Dunphy and Stace (1993) maintained that organizations needed a model of change that was essentially a 'situational' or 'contingency model.' This model should be one that indicated how to vary change strategies to achieve 'optimum fit' with the changing environment (Dunphy and Stace, 1993). Furthermore, Dunphy and Stace's (1988, 1992) model of change is more situational in design and supportive of the view that 'that the selection of appropriate types of change depends entirely on a strategic analysis of the situation' (Dunphy and Stace, 1992). They also maintained that change does not always occur on an incremental basis, but can also occur on an irregular basis. They also suggested that transformational change not is only consultative but is also coercive in nature. Moreover, they argue that the contingency model to change is premised on the theory that situational variables determine the structure and performance of organizations and in reality, there are no two organizations alike, will not face the same situational variables. Invariably, this may impact upon their operations and structures (Dunphy and Stace, 1993). The model developed includes both the formulation and implementation requirements of various types of change and leadership styles. Their typology of change and conditions for use is illustrated in Table 4 below.

<table>
<tr><td colspan="2" rowspan="2"></td><td colspan="4">Scale of Change</td></tr>
<tr><td>Fine Tuning</td><td>Incremental Adjustment</td><td>Modular Transformation</td><td>Corporate Transformation</td></tr>
<tr><td rowspan="4">Style of Change Management</td><td>Collaborative</td><td colspan="2" rowspan="2">Participatory Evolution
Use when an organization is fit but needs minor adjustment, or is out of fit but time is available, and key interest groups favor change.</td><td colspan="2" rowspan="2">Charismatic Transformation
Use when an organization is out of fit, there is little time for extensive participation, but there is support for radical change within the organization.</td></tr>
<tr><td>Consultative</td></tr>
<tr><td>Directive</td><td colspan="2" rowspan="2">Forced Evolution
Use when an organization is fit but needs minor adjustment, or is out of fit but time is available, and key interest groups oppose change.</td><td colspan="2" rowspan="2">Dictatorial Transformation
Use when an organization is out of fit, there is no time for extensive participation and no support within the organization for radical change, but the radical chance is vital to organizational survival and fulfillment of the core mission.</td></tr>
<tr><td>Coercive</td></tr>
</table>

Table 66: The contingency Model of Change - Dunphy and Stace's Model of Change (1993)

A major criticism of this model is its dependency on the interpretation of the model by the initiators and implementation, in that change may be influenced more by the style of the 'change driver' than by an efficient organizational change analysis. If the 'change driver' has a collaborative leadership style, then employees would be allowed power, either through the formal or informal process, significant enough to influence both the goals and means of change. If the 'change driver' is characterized by a consultative style of leadership, power would be placed more firmly in the hands of managers and would involve managers consulting widely among employees and being open to influence from employees about how change is affected. If the 'change driver' is characterized by a directive style of leadership, this would involve the use of legitimate authority to bring about organizational change, being most effective when subordinates respect the authority. If the 'change driver' adopts a coercive style of leadership, this would involve using explicit or implicit force by managers on employees, and an autocratic mode of decision-making.

Using the U.N. context as the backdrop, there are several other essential factors should be considered in this model. Both external forces, such as different agenda and priorities from various governing bodies as well as the institutional pressures including resistance and structures are critical components in changing management. Also, in reality, it is not uncommon that, at any given time, different leaderships and contrasting management styles co-exist in the U.N. family. Subjective to interpretation often results in promoting bureaucracy.

II. Anderson and Anderson's model of change (2001)

The Anderson and Anderson's model of change is an entirely comprehensive model designed to address all kinds of organizational change and one that also captures the cyclical nature of organizational change (Anderson and Anderson, 2001). This model consists of three areas: content (organizational and technical areas that need a change); people (the mindset, behavioral and cultural changes required to deliver the proposed change); and process (actions required to plan, design and implement the proposed change). All three processes must be carried out in an integrated and unified manner. The model, which has nine phases, is illustrated in Figure 40 below.

Figure 40: Anderson and Anderson's Model of Change (2001)

III. An integrated change process framework - Burke (1988 and 1990)

Each of the theoretical frameworks briefly described above focuses on organizational change from the broader, general patterns of change that affect the organization as a whole, down to the difficult psychological adjustment individual members of the organization must make during the actual implementation process. However, these three perspectives do not provide an integrated understanding of the organizational change process that is useful for managers who find themselves in the position of planning and implementing change (Siegal et al. 1996). The Change Management framework (Burke and Spencer 1990; Burke et al. 1991) offers just such a perspective. This framework integrates the strengths of the theoretical perspectives presented above and incorporates important issues involved in evaluating the overall effectiveness of the change process. As shown in Figure 41, the framework consists of the following six dimensions:

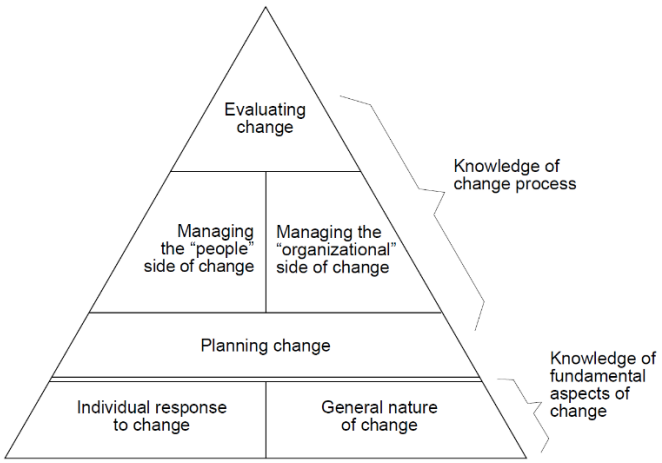

Figure 41: The Managing Change Management Framework (Burke 1988, Siegal et al., 1996)

1. Individual response to change: This dimension concerns the nature, prevalence, and utility of resistance to change. Examples of related issues include: change is not always resisted; apathy can be harder to work with than resistance; involvement in the direction of change can reduce resistance.
2. General nature of change: This dimension is concerned with whether effective large system change is evolutionary or revolutionary in nature and the characteristic patterns that typify change efforts in organizations. Examples of related issues include: certain patterns typify change efforts; effective change requires certain elements or transformation or dramatic steps.
3. Planning change: This dimension deals with the causes of change in organizations, articulation of the vision, how to get from the present to the future, and barriers to effective transitions. Examples of related issues include the importance of surfacing dissatisfaction with the present state and articulating the desired future; the power of 'turf issues' among and between different groups and subcultures; involving people from all areas of the organization in the planning process rather than relying on a single entity or group.
4. Managing the people side of change: This dimension is concerned with how, when and how much to communicate about change within the organization and psychological issues related to transition. Examples of related issues include the need to communicate what will and will not change; allowing people to disengage from and grieve the loss of the present state; utilizing the power inherent in groups as a positive force.

5. Managing the organizational side of change: This dimension concerns the design and structural issues of systemic and long-term change efforts. Examples of related issues include the contribution of slogans and symbols to establishing credibility and importance; the need to reduce barriers and restraints to achieving goals rather than applying more pressure.
6. Evaluating change: This dimension deals with the indicators of a change effort's effectiveness. Examples of related issues include: recognizing that complaints can often be a sign of progress and positive energy; the need to modify reward systems to support changes in other areas; the importance of providing feedback to people regarding progress made.

Dimensions of Model	Content and issues addressed	Sources
Individual Response to Change	Change is not always resisted, apathy can be harder to work with than resistance, and involvement in the direction of change can reduce resistance.	Burke (1994); Brehm (1966); Hambrick and Cannella (1989); Kanter (1983); Marris (1975); Tichy and Devanna (1986)
General Nature of Change	Certain patterns typify change efforts, effective change requires certain elements of transformation or dramatic steps.	Adizes (1979); Formaciari et al. (1993); Gersick (1981); Greiner (1972); Jantsch (1980); Lewin (1958); Schein (1987); Tichy and Sherman (1993)
Planning Change	The importance of surfacing dissatisfaction with the present state and articulating a desired future, involving people from all areas of the organization in the planning process rather than relying on a single entity or group, the power of 'turf issues' among and between different groups and structures, recognizing the impact that the external environment has on the need to change	Beckhard and Harris (1987); Duval and Wicklund (1972); Katz and Kahn (1978); Lewin (1958); Lippitt et al. (1958); Pfeffer and Salancik (1978); Schaffer and Thomson (1992)
Managing the People Side	The need to communicate what will and will not change, allowing people to disengage from and grieve the loss of the present state, utilizing the power inherent in groups as a positive force.	Burke (1994); Duval and Wicklund (1972); Goodstein and Burke (1991); Hornstein et al. (1971); Kanter (1983); Lewin (1951)

Managing the Organizational Side	The contribution of slogans, signs, and symbols to establishing credibility and importance, preventing knee-jerk reactions to using structure changes as a panacea, the importance of involvement as a means for building commitment, the need to reduce barriers and restraints to achieving goals rather than applying more pressure.	Beckhard and Harris (1987); Bennis and Nanus (1985); Chandler (1962); Duncan (1979); Schein (1985); Tichy and Devanna (1986)
Evaluating the Change efforts	Recognizing that complaints can often be a sign of progress and positive energy, the need to modify reward systems to support changes in other areas, the importance of providing feedback to people regarding progress made, the awareness that a reduction in presenting problems may often reflect a change in symptoms rather than root causes.	Burke and Litwin (1992); Lawler (1992); Maslow (1965); Schuler and Jackson (1987)

Table 67: Theories Background of the Managing Change Management Model

The Managing Change Questionnaire (MCQ) (Burke 1988 and 1990) has been extensively used to assess executives', managers' and organizational change practitioners' different perspectives regarding the fundamental propositions in each of the above six sub-dimensions (Table 5). The measurement instrument is grounded in principles and concepts derived from social psychology, organizational theory, organizational behavior as well as from consulting experience (Beckhard and Harris, 1987; Burke, 1982, 1994; Burke and Jackson, 1991; Burke and Litwin, 1992; Chandler, 1962; Duval and Wicklund, 1972; Goodstein and Burke, 1991; Kanter, 1983; Lawler, 1992; Lewin, 1951, 1958; Lippitt et al., 1958; Nadler, 1981; Schein, 1980, 1985, 1988; Tichy, 1983; Tichy and Devanna, 1986).

Appendix B U.N. and Strategic Management Schools of Thought

The first use of the term strategy to refer to business was by Chandler (1962) to elaborate the bullish economic growth in Western companies. Ansoff (1965) argues that strategy is 'an analytic approach to business policy for growth and expansion.' Finally, The pioneers of strategy as applied to business in the 1960s and the 1970s fall into three main overlapping schools, the Design school, the Planning school and the Position school, which remain extremely influential today despite their detractors.

The Design School is useful for formulating a strategy and especially when there is a major reformulation, and the organization is facing stable environments. It describes strategy formation as a process of conception (Mintzberg, 2009), and it focuses more on how strategies should be formulated. It was first presented by Andrews (1965) and has the motto of 'Establish fit.' It proposes that strategy should attain a fit between the internal capabilities of the organization and the external opportunities. There are basic premises that underline the concept: 'strategy formation is a process of conscious thought, responsibility rests with the CEO, models should be simple and individually designed, the strategy should be explicit, and thinking should be separated from acting' (Mintzberg, 2009). The design school represents the most influential view of the strategy formation process. In the words of this school's best-known advocates: 'Economic strategy will be seen as the match between qualifications and opportunity that positions a firm in its environment' (Christensen, Andrews, Bower, Hamermesh, and Porter, 1982). Rumelt (1997) has also provided the best framework for how strategy formation should be:

1. Consistent: The strategy must not present mutually inconsistent goals and policies.
2. Consonant: The strategy must represent an adaptive response to the external environment and the critical changes occurring within it.
3. Advantageous: The strategy must provide for the creation of an advantage in the selected area of activity.
4. Feasible: The strategy must neither overtax available resources nor create unsolvable subproblems.

5. The relevant knowledge must be established before a new intended strategy has to be implemented. In order words, the situation has to remain relatively stable or at least predictable;
6. The organization must be able to cope with a centrally articulated strategy.

The Planning School is useful for implementing a strategy, especially in big organizations operating in stable environments and organizational cultures that value loyalty to top management's decisions. It refers to strategy as a formal process and sets very clear steps on how to assess the external and internal conditions of the organization. It has a formalized approach of planning, and its motto is 'predict and prepare' (Mintzberg, 2009). Ansoff (1965) described strategy making as a systematic process. The main intention of strategy formulation is to be in control, and many formal techniques are developed to support that goal. It prefers formalization in the strategy formulation process in a format of closed-ended and convergent while it provides more freedom and open-ended in the implementation stage. Secondly, Ansoff stressed the importance of recognizing different levels of decision: strategy, policy, programme, and standard operation procedure. The degree of uncertainty and risk decreases as one more down this list, which therefore can be delegated accordingly down the organization. Ansoff (1965) also proposed the importance of gap analysis and the importance of synergy which have become crucial importance in modern business thinking.

The closely related design and planning schools inspired the development of a vast number of one-best-way strategic planning models and how-to publications which tend to have a number of common management components.

1. Strategy as rational decision-making process;
2. A thorough analysis of the competitive environment;
3. A thorough analysis of the organization's resources and distinctive/core competencies.
4. The setting of clear goals and objectives;
5. The evaluation of different strategic options;
6. A hierarchy of targets; and
7. Efficient implementation.

The Positioning School is useful for big organizations operating in mature and competitive markets. The Positioning school focuses on the selection of strategic positions in the marketplace and sees strategy as an analytical process (Mintzberg, 2009). It argues that only a few strategies are desirable in a certain industry and a limited number of the main generic strategies should be applied in a competitive market environment. Compared to the previous two schools it adds more content and substance to strategy formulation while providing a limited selection of strategic positions. It continues to emphasize the formality of the planning school but gives a major role to the analysts instead of focusing only on the top management. To Porter (1980), the purpose of formulating competitive strategy 'is to find a position…where the company can best defend itself against these…forces or can influence them in its favor.' From Porter's perspective, strategists do not so much design strategies but rather select them from the list of generic strategies. Porter's concept of 'value chain' also played a major role in the development of both quality management and business process engineering, particularly influence in the 1980s and early 1990s. Henderson (1979) viewed modern business as the product of selection brought about by nature competition and that it owes more to intuition, expediency, and chance than it does to an integrated strategy. The Positioning school is commonly used among consultants, and different techniques have been developed to find the 'one best way' for organizations (Mintzberg, 2009).

Limits of the Rational Strategy Schools

The design school, planning school, and position school, despite their enduring influence there have, however, been some valuable critiques. Mintzberg, Ahlstrand and Lampel (1998) point out the weakness in the design school including ignorance the importance of incremental or emergent strategies, ignorance of the importance of big players in formulating strategy, ignorance of uncertainty, and ignorance of the issues of creativity and innovation.

To the position school, Mintzberg et al. (1998) criticize a number of fronts because it is based on similar predispositions include the focus is too narrow on economics, ignore political, social and cultural factors, a bias towards the big stable established companies, ignorance of context influence, no place for engendering commitment and energy in the school, and evidently it is more

difference between companies in the same industry than between different industries (Rumelt, 1991; McGahan and Potter, 1997).

Regarding the planning school, Mintzberg (1994) argues that, while planning is necessary, an over-emphasis on detailed formal long-range planning can push out other processes that are equally important. In particular, the creation and development of powerful visions can become ossified into rigid strategic position, without the flexibility to respond to change. Quinn seconded Mintzberg's points (1994) coming to a similar conclusion that 'a good deal of the corporate planning I have observed is like a ritual rain dance; it has no effect on the weather that follows, but those who engage in it think it does.' Steiner (1979) argued that the problems in the planning school were caused by

1. Planning being delegated to planners and top management failed to spend time themselves on long-range planning;
2. The process being over-formalized and driving out innovation; planning processes in use not being regularly monitored and reviewed;
3. Top managers are ignoring the plan in practice and making intuitive decisions; and
4. Poor quality goal-setting and failure to use the plan as a framework for reviewing management performance.

Carr and Tomkins (1996) also criticized that strategic planning failed because companies tended to relegate it to its separate department away from the realities and challenges companies faced, making it largely irrelevant. Aa result, the impact of this kind of rigid approach in practice, the lack of consistent evidence for its effectiveness, academic difficulties in supporting strategic planning, and the increasing turbulence of the external environment led to strategy failing down the agenda of companies in the private sector. In the traditional top-down, rigid planning approaches, the process of continuous learning can also be lost, pushed out by long-range forecast and planning cycle, which allow for little flexibility. Mintzberg (1994) and Stacy (1993) argue for the crucial importance of learning, including discovery, choice, and action, in the continuous process of making a strategic decision.

The Alternative Ways of Thinking about Strategy

When the traditional schools of thought on strategy and strategic planning process have continued to dominate the practice of strategic management academia, which has started developing various alternative ways of thinking about strategy, particularly the learning school, the resource-based school, the environmental school, and the political school. They are closer to the values and culture of U.N. Organizations, are reviewed. Stacy (1993), drawn on the insights of chaos theory, went further and argued that the fundamental assumptions underlying traditional strategic planning, based on cybernetics, the study of artificial or natural systems which store information and use the feedback mechanism to guide and control their behavior, are fundamentally flawed. He argued that the system that managers have to cope with be now too complex to allow them to initiate the future strategic direction of their organization fully. In other words, the complexity of the system is such that new strategic direction can only emerge, which is closer to the concept of in the Learning school of thought.

The Incrementalism School is hypothesized to be especially relevant in complex environments, in organizations lacking a dominant center, and in new situations. The learning school is especially viable for understanding emergent strategies when the environment is in flux. This school suggests that strategies are born by management learning over time about strategy formulation. Individually or collectively they learn about certain situations and develop patterns of behavior that work (Mintzberg, 2009). Its main question is how strategies actually from the organization and not how they are formulated. This school of thought is not focusing on the individual leader, but on continuous learning as a collective process. The strategic leader is more responsible for managing this learning process instead of controlling it. Therefore, a community of practice becomes critical in this school. Quinn (1980), in his field study in the US, concluded that planning did not describe how they formulated their strategies instead of the expression of 'logical incrementalism.' Even so from his findings, Quinn still suggests being in keeping with the approaches of the Design, Planning and Position schools, still viewed the senior managers as the key actors in the strategy process. While Quinn paying his focus on incrementalism, other researchers have focused on the important role of 'innovation' within an organization in driving strategy, what has been called 'internal venturing' (Pinchot, 1985). 'Commitment' and 'capacity' also a focus from Senge, Heifetz and Torbert (2000), argue that organizations that will truly excel the future will be 'the organizations that discover how to tap people's commitment and capacity to learn at all levels in an organization.'

The learning school provides a useful counterbalance to the mechanistic approaches of the traditional rational schools, and, as such, is a useful perspective for the U.N. However, there is also the danger of going too far in the other direction. In the U.N. context, the development of a vast number of innovations and experiments can result in a lack of direction or shared vision of focus from U.N. mandates and missions. It is also relevant to the real issue of power and self-interest in U.N. Organizations, which can influence which innovations are promoted into a direction based on personal or political agenda. Also, there is a danger of the strategy moving towards a less desirable one, as a result of a series of small steps around without a direction. In U.N. Organizations the legitimization of learning is determined by the criteria for the organizational success. Learning is in the Human Resource policy that staff members are encouraged to identify with the goals of the organization and to give full commitment to learning to achieve these aims. That is a common aspiration of U.N. Organizations. However, real learning may result in a questioning of the legitimacy, not only of these goals, but also the dominant modes of thought in the organization.

The Power School is a different perspective to focus on the nature of organizations as political structures whereby decision are determined, not by rational analysis, but by negotiations between the various power blocks. Mintzberg (2009) described it as a process of negotiation by either conflicting groups within an organization or by the organizations having conflicts with their external environment. Strategies that might result from a process like that tend to be more emergent. Power and politics are the determining factors of strategy making and policy become the term for exploitation of the power in other than only economical ways. Power could be defined on two levels: micropower games within the organization and macro power concerns in the external environment. Micropower sees strategy more as an interplay, in the form of political games inside the organization. It refers to bargaining and decision-making power, the status quo and the conflicting interest of the different groups. Mintzberg (1989) defined and analyzed the various types of political games played within organizations. Macro power refers to the controlling and cooperating power of the organization with other external stakeholders (Pfeiffer and Salancik, 1978). It involves dealing with the different interest groups and strategic maneuvering to reach the organization's goals. In certain cases, cooperation becomes more important than competition and organizations form strategic alliances to gain competitive advantage. However, if strategic decision-making is purely about power-brokering, then this begs the question as to whether there is any value in any form of strategic planning in U.N. Organizations, as it is usually understood.

On the other hand, Hudson (1995) argues that strategy is particularly important because they are usually coalitions of diverse people with different aspirations that need to be integrated into a shared focus for the organization to be successful, therefore, the tendency towards political power-plays and empire-building in U.N. Organizations is not always coming with negative consequences but can also help to ensure that strategic thinking maintains a focus on the rational interests of U.N. organization and their beneficiaries.

The Resource-Based School defines strategy formation as a collective process. It is concerned with the influence of culture in determining and maintaining stability (Mintzberg, 2009). Social interaction, shared beliefs, and values are the most important elements of organizational culture, and they encourage long-term stability in strategy formulation as well. The strategy is best described as deliberate and is rooted in collective intentions. It mainly focuses on the embedded resources and capabilities of the organization that creates competitive advantage. This ideology does not encourage change in the strategy, but rather nurtures the existing ones. Regarding strategic models, this school of thought provided us with the resource-based theory developed by Birger Wernerfelt (1995). The result-based view, particularly, distinguishes between resources, the basic inputs, and assets of the organization are the core units of analysis along with unique capabilities or core competencies. The core competencies are built from the collective learning of the organization and the distinctive ways that the organizational resources are coordinated and configured together in teams or bundles of resources to exploit the organization's unique characteristics in achieving its objectives (Grant, 1997). The bundles of resources can also include how the organization is linked to other organizations, which can be critical to the success of a U.N. organization and difficult to emulate. The resource-based view is also concerned how the organization organizes various resources in synergy to create a successful organization. Grant (1997) suggests a model of strategic analysis using the resource-based view, which can be adapted for use by the board and staff. The same concept can apply to U.N. Organizations. The language of competitive advantage is not one often employed by U.N. Organizations. However, in the fields of resource mobilization or technical cooperation projects competing for contracts from the local authority or even from other U.N. Organizations, it is hard not to recognize that U.N. Organizations are competing with others. In these circumstances, U.N. organization have no choice but to maximize the potential of their existing resources and capabilities and in a way that is sustainable for as long as possible.

The Environmental School puts the external environment the most important factor in making strategic choices (Mintzberg, 2009). Particularly in the U.N. context, it sees strategy formation as a reactive process and positions environment, leadership, and organization as axial forces in strategy making. The views of this school define strategic management as a range of Strategic Choices influenced by forces and demands of the external environment. In contrast with the other schools of thought, leadership, and organization take a subordinate role. The organization must respond to the external forces. Thus leadership becomes a passive element in the strategy formulation. The environmental school has its roots in the contingency theory that promote the idea of 'it all depends on the size of the organization, stability, complexity of the context and external hostility' (Pugh, Hickson, Hinings, and Turner, 1969). This school also appears a lot in the work of Hannan and Freeman (1977) describing population ecology. They doubt that organizations arise through learning and adaptation, the basic structure of the organization is set shortly after the start. Mintzberg characterizes this school as being 'anti-strategic-choice.' The greatest weakness of this theory for the use of strategic management is the vaguely defined dimension of the external environment. Nevertheless, to U.N. Organizations, to maintain their relevance in the global society, the strategic formulation process cannot ignore the significant influence of those environmental factors.

School of Thought	Strategy formation as	Approach	Applicable to		
			Private Sector	Public Sector	U.N. Organizations
Design	a process of conception	Clear and unique strategies are formulated. The internal situation of the organization is used to match the external environment.	Yes	Yes	Yes
Planning	a formal process	A rigorous set of steps are taken, from the analysis situation to the execution of the strategy	No	Yes	Yes

Position	an analytical process	It places the business within the context of its industry and looks at how the organization can improve its strategic positioning within that industry	Yes	No	No
Entrepreneurial	a visionary process	The visionary process takes place within the mind of the charismatic founder or leader of an organization. Rely heavily on intuition, judgment, wisdom, experience, and insight	Yes	No	No
Cognitive	a mental process	Analyses how people perceive patterns and process information. Concentrates on what is happening in the mind of the strategist and how it processes the information	No	Yes	No
Learning	an emergent process	Management pays close attention over time to what does work and what is not functioning. They incorporate 'lessons learned' into their overall plan of action. The world is too complex to allow strategies to be developed all at once. As clear plans or visions. Strategies must emerge in small steps as organization adapts or 'learns'	Yes	Yes	Yes
Power	a process of negotiation	The strategy is developed as a process of negotiation between power holders within the company, and/or between the company and its external stakeholders.	Yes	Yes	Yes

Cultural	a collective process	Tries to involve various groups and departments within the company. Strategy formation is viewed as a fundamentally collective and cooperative process. The strategy that is developed is a reflection of the corporate culture of	Yes	Yes	Yes
Environmental	a reactive process	The strategy is a response to the challenges imposed by the external environment. Where the other schools sees the environment as a factor, the Environmental School sees it as an actor	Yes	Yes	Yes
Configuration	a process of transformation	Strategy formation is a process of transforming the organization from one type of decision-making structure to another.	No	No	Yes

Table 68: Overview the Sector Mapping to the School of Thought (Veldman and Szabo, 2015)

Appendix C U.N. Results-Based Management

Results-based frameworks state the direct relationships between the intermediate results of activities all the way to the overall objectives and goals. They show the causal relationship between programme objectives and outline how each of the intermediate results, outputs and outcomes relates to and facilitates the achievement of each objective, and how objectives relate to each other and the ultimate goal. Results-based frameworks do form the basis for monitoring and evaluation activities at the objective level. The U.N. results system, therefore, builds on a two-way process (top-down and bottom-up) to be more efficient:

1. Top-down: the establishment at the corporate level of an overarching Goal and a broad set of Goals, Sub-Goals, Strategic Areas of Support, and corporate outcomes and indicators;
2. Bottom-up: the articulation of actual results plans – expected results and outputs – as well as associated outcome indicators and partnerships by operating units, primarily at the country level.

Intended effects on U.N. results-based management

In the absence of a single statement of strategy in U.N. that results-based management can be evaluated against, the approach proposed is to identify the following six common factors dimensions of results-based management, adopted by most of U.N. Organizations, as a structure for analysis:

Results measurement and results management capacity

The successful implementation of results-based management depends on the extent to which performance measures are linked to an existing policy or strategic framework. From an organizational perspective, performance management efforts are necessarily connected to the business plan and the budget, or this organization is likely will have serious problems in management since the performance measurement approach have no real meaning to the program, that requires the existence of a strategic plan, inclusive of organizational goals and objectives that reflect a long-term vision or mission (National Performance Review, 1997 and, 1999; Downey,

1998). Ensuring performance indicators and measurement practices are linked to strategic objectives or to expected results that is one of the main keys to successful performance management (OECD, 1997; Poate, 1997; Epstein and Olsen, 1996; Newcomer and Downy, 1997-98; Nakamura and Warburton, 1998). From doing so, performance measurement is integrated within strategic planning (Epstein and Olsen, 1996) and therefore 'knowledge about strategy implementation is increased, and the strategy is more likely to be realized' (PricewaterhouseCoopers, 1999). Nonetheless, implementing results-based management can be challenging to organizations, especially those that lack the in-house technical capacity. A technical expert can provide guidance on every aspect of development and use of the performance measurement system. 'The first time around, guidance on collection and analysis methods from a technical expert will often save time, offer reassurance, and improve results' (Plantz, Greenway, and Hendricks, 1997). Employees with experience in any aspect of results-based management should be directly involved in implementation (National Performance Review, 1999). 'Evaluators also possess the technical expertise needed to inform the design of performance measurement systems as well as the analysis of performance data' (Wholey and Newcomer, 1997).

A capacity to learn and adapt

A major hurdle in implementing results-based management is the relative lack of experience and expertise (Mascarenhas, 1996; Hatry, 1997). Successful implementation is dependent on managers and staff having the necessary knowledge, skills, and abilities to develop and use the performance measurement system (USGAO, 1997b; Itell, 1998; Newcomer and Downy, 1997-98; Poate, 1997). The lesson has therefore been to provide training for nearly all of those involved. Training will provide managers, staff and key stakeholders with the knowledge and skills they need to work with data, understand it and use it to improve effectiveness. (Gibson and Boisvert, 1997) It has also been suggested that to ensure the institutionalization of results-based management, political appointees in strategic areas such as budget officers should also receive training (Newcomer and Wright, 1996-97). Training can also assist in changing the organizational culture. Once managers and staff understand how results-based management works, they start to appreciate its potential (Epstein and Olsen, 1996). Poate argued (1997) 'When new systems are bring introduced, training is likely to be needed at two levels: familiarity with the basic concepts linked to the underlying principles of reform; and operational support to define objectives, construct

performance indicators, use indicators for reporting and review, and evaluate. The former can be achieved through briefings and supplementary material. The latter required a sustained effort from something like a methodology support group.'

A results-oriented accountability regime

Implementing results-based management is a significant U.N. management reform which presents new challenges in defining accountability. The traditional notion of accountability, the top-down authority responsible to the people through elected policymakers and senior administrators, must be reshaped to reflect this new management environment (Kettl, 1997). It is recognized that '...it is a significant challenge to effect a culture change that allows employees to realize that they are accountable for results - not just to their supervisor, but to the organization, customer, and stakeholder' (National Performance Review, 1999). 'Results-based management implies a shift in focus away from procedures and outputs management to outcome level results achievement. It is a matter of recognizing that there is a responsibility to influence the outcome result that's being sought' (State Services Commission, 1999). There remains, nonetheless, an obligation to demonstrate what outcome results have been accomplished. 'The key is to make this demonstration the essence of the accountability regime. Accomplishment accountability is the credible demonstration of what one has achieved that is of significance and value' (Mayne, 1997).

Support system

Successful implementation of results-based management requires management systems support the systematic collection, recording, analysis and reporting of performance information (Olsen, 1997; Poate, 1997; PricewaterhouseCoopers, 1999). For some organizations, this may mean a re-aligning existing system to ensure that they collect the right information needed for decision-making. For avoiding costly duplication efforts, organizations should carefully examine existing data collection, monitoring, evaluation and research functions and the information they already collect. Existing systems may already be compiling data related to outcomes (Plantz, Greenway, and Hendricks, 1997; Nakamura and Warburton, 1998). 'Another advantage of making use of existing information is that the personnel who have been responsible for the previously existing data systems will not be as likely to view the new performance measurement system as a direct threat to their job security' (Nakamura and Warburton, 1998).

Leadership and commitment

There is strong evidence to suggest that senior level leadership is necessary for successful implementation (Plantz, Greenway, and Hendricks, 1997; Wholey and Newcomer, 1997). Without the support of executives, there is no impetus for change (Epstein and Olsen, 1996). It is critical that they fully support and actively participate in both the creation and implementation of results-based management (Downey, 1998; Poate, 1997). By actively participating in implementation, they are demonstrating their commitment to the reforms (Alford and Baird, 1997). There is also evidence to suggest that the leadership role is shared. Although the support of top political leadership is essential to ensure the success of the system (Newcomer and Downy, 1997-98). It is important to cascade leadership throughout the organization (National Performance Review, 1999).

Programme focus

The intended purpose of setting strategic goals has to allow greater focusing of the programmes. Implementing results-based management is a long-term process. It takes the time to plan, develop indicators, and align management systems before even collecting any performance data (OECD, 1997). As suggested by the experience of OECD countries and development agencies, organizations have to be patient and persistent. In this type of process, building consensus and maintaining momentum is crucial to success (Poate, 1997). That is particularly important in a highly politicized organization like U.N. Organizations where the political timetable may present a formidable obstacle to long-term implementation (Newcomer, 1996-97). Though it may be tempting to rush implementation, organizations have found that this only decreases the likelihood that the measurement system will be useful (Plantz, Greenway, and Hendricks, 1997). The idea is to take the time to develop and implement a results-based management system with strategy focus that will be worthwhile and is accepted throughout the organization.

Appendix D Investigating Critical Factors for Project Success and The Impact of Certification/Training – The United Nations Context

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ABSTRACT

This paper investigates via a survey methodology, project critical success factors (CSFs) of a U.N. organization as perceived by computer and information technology trained and certified professionals. I adopt our CSFs from three seminal studies done at different times. I provide a critical analysis of those factors for the 21st century United Nations context facing today an increasing need for agility in a fast-changing global environment. I investigate project CSFs in this study with two goals in mind: Firstly, to test the applicability of well-studied CSFs in the United Nations context, and secondly, to assess the influence of certification/training on these factors. Results show that 5 out of 13 factors differ in the United Nation's context and that certification is not perceived as important while training is. Results are discussed bringing forth insights into the nature of UN-type organization project management. Results have shown that close to 40% of the CSFs previously studied do not apply to the United Nations context. At the same time, correlation analysis shows that training in project management knowledge areas are more important that actual certification.

Keywords: project management; united nations; project management certification; training; critical success factors

INTRODUCTION

In today's rapidly changing world, the project management approach continues to be adopted by commercial and not-for-profit organizations. These organizations have increasingly been restructuring their work into programs, projects and products using various project management methodologies, frameworks, and practices. They do so because of the project management promise

to realize business objectives and strategies, keeping them in-line with overall business vision and goals.

This is not only true in the commercial sector, but in the United Nations (UN) system where agencies are pressured to engage in commercial businesses (extra-budgetary activities) to ensure total funding of their programmes. As a result, their Information Technology (IT) departments have widely deployed project management certification training programs, mainly PRINCE2® thereby starting the process of integrating a project management culture into their day to day business and by extension, culture. Today, they continue to increase the level of integration of the project management culture into their existing management frameworks and increasingly customize tools to monitor and control key performance indicator in order (1) to meet business expectations, and (2) to cope with the changing global economics needs in a complex politically driven environment.

It is accepted today, across all work sectors, that proper management of projects results in desired economic outcomes, thereby constituting one of the most important organization developments (Svejvig, & Andersen, 2015) – a trend that is now clearly evident in the U.N. system. Ever since the 1980's, research in project management has continued to be active, however the conceptual base has remained static with a technical perspective and focus (Morris et al., 2011). This classical view of project management has been challenged by many, viewing it as a technical tool to manage project schedule (time, money and scope). Since Jugdev, Thomas, and Delisle (2001), a new perspective of project management seems to be emerging as a holistic discipline where the real project is that the organization is temporary and is engaged in a continuous evolutionary spiral towards increasing levels of efficiencies and effectiveness. This is a clear demarcation from the classical view and takes the notion of project management into the complex terrain of organizational transition and change. The U.N. system has always been a pluralistic type of organization and this new view of project management is a perfect fit.

The United Nation is not-for-profit, engaged in primarily international development projects mostly financed with member-states' development aid. These projects may be internal to the organization for building capacity (as an example) and external for the socio-economic development process of developing countries. Considering the financial commitments and the associated activities worldwide, little research has been done on project management in the U.N.

system of organizations. To that effect, we firmly agree with Khang and Moe (2008) that the success of the not-for-profit projects, and of course its efficient and effective management, in the U.N. system of organizations determines, on the one hand, the socioeconomic progress in the recipient countries, and on the other, the contribution of the donor countries and agencies.

With the proliferation of project management throughout all sectors of industry, the maturation of project management as an academic discipline, and the desired certification requirements, PRINCE2® has successfully been introduced in the U.N. agencies, including the one studied herein, which we will refer to as UNO. Since 2009, the UNO as one of the U.N. specialized agencies started to implement PRINCE2® training within the section of information and communications technologies as the standard methodology and daily practice for project management. To date, over 200 people have been trained in PRINCE2® with over 170 who have achieved certification at the Foundation and/or Practitioner level.

Evidently from the foregoing that understanding the critical factors for project success within the present context is essential. From an operational perspective, this kind of knowledge would help the UNO to plan more effectively for higher project management maturity and cultural change. From a strategic viewpoint, having a deeper understanding of how to manage these CSFs would enhance the ability of donors and implementing agencies to increase the probability of achieving an acceptable level of the desired outcomes, as well as provide a fertile platform for project monitoring, control and future project forecasting and funding (Aubry & Hobbs, 2011).

Consequently, after 3 years of implementation of the project management, we assess in this article the factors for successful project management and their relationships from the project manager perspective (certified, trained or both), with the primary aim to better understand and validate those that apply to the U.N. type of agencies.

I therefore present in this article, the context of this training/certification initiative in the UNO followed by the results of an evaluation of this initiative with two primary aims: (1) To update previously established (in an industry/commercial context) project management critical success factors in the context of the United Nations; and (2) To investigate the influence of project management certification and training on the most important critical success factors.

It would be beneficial at this point to present the flow of the article giving an overview of the knowledge treatment and progress towards our research goals. The next section provides a brief review of the literature for the purpose of positioning our own study and its contribution. Based on prior research work, we follow with a section on theoretical background and hypothesis development. Before we enter into the analysis stage, we then elaborate on the context of the study (which is the central theme and primary contribution – i.e. the context of the United Nations) by first describing in general the U.N. and then the UNO (a U.N. agency). At this point, we present the methodology and data collection, which includes a description of the survey used and the analytical strategy followed in our analysis of the results. In the last subsection, we attempt to bring the results into focus on the context at hand, thereby providing further insights supported by observations from the authors. In our last section, we conclude and elaborate on limitations to the study and suggestions for future research.

LITERATURE REVIEW

Studies within our scope of interest continue their attempts to explain the various dimensions of success/failure factors influencing project outcomes. Overall, there seems to be still a quite significant percentage of projects across different organizations that (a) did not meet initial requirements, (b) did not meet management/customer satisfaction, and/or (c) were not aligned with organizational objectives and vision. As a result, increasingly more organizations are committing to project management training and to hiring certified project management professionals, with the hope that they could help increasing the chances of project success.

This trend is felt (as well as the author's experience) across industry and academia where more and more organizations are demanding project management skills as part of their job description, and academia is increasingly creating project management course and programs. It is evident that the realization of project management benefits became the primary driver, for the increase in demand for project management training worldwide. From a practical perspective, the increasing demand for project management training and learning programs, many of the traditional project management process frameworks and techniques were transformed into numerous systems, tools, and user-friendly applications, with increased sophistication.

At the same time, project management methodologies continue to become more comprehensive and rich as it not only strengthens and redefines itself as a multi-disciplinary field of inquiry but expand into a deeper level of synthesis and interpretation. Shenhar and Dvir (2007) studied the relationship between project management success factors and its performance, in the fields of technology innovation management, new product development, entrepreneurship, and operation management. His analysis revealed that very few research works (at that time) had made a significant influence on the discipline and practice of project management. Since then, project management has covered extensive grounds with contributions from diverse and alternative perspectives (Svejvig & Andersen, 2015).

Koskela and Howell (2002) also suggest no fewer than nine different theoretical perspectives as appropriate frameworks for PMP® research, depending on the level of analysis (organizational or individual) and the project life-cycle phase. Snider and Nissen (2003) addressed the limitations of the project management body of knowledge taxonomies by advocating a knowledge flow approach to project management theory. Bredillet (2007, 2008) identified nine major schools-of-thought utilized at that time in project management research. He suggested, "there is a growing need to clarify project management research trends to support the development of bodies of knowledge, professional certifications, educational programs, and ensuring competencies as a source of performance and creation of value according to the current socio-economic context and management situations organizations have to face."

As the body of projects and project management research expanded in depth and breadth, it became evident that more studies were a reaction to the classical view (Crawford & Helm, 2009; Cook-Davis, Crawford, & Lechler, 2009). Moreover, these studies were viewed as a response to the poor track record of project's success (Morris et al., 2011). A critical view of the project management literature can be found in Svejvig and Andersen (2015). In this section, we continue the discussion of important articles dealing with the focus of the study, namely critical success factors.

In the last decade and regarding success factors, a significant number of research work focused on leadership and effective communication as a critical component for the identification of CSFs. Hyväri (2006) studied the CSFs by using different organizational background variables

and compared the results with Pinto's (1990) Project Implementation Profile ("PIP") method. Those studies ranked a set of CSFs based on their importance. Respondents ranked communication, client consultation, and client acceptance as the 3 most important factors for project managers in the Information Systems (IS) domain, (Finch, 2003). Those findings conclusively showed that leadership was a critical characteristic of effective project management. It was also found that the most significant critical factors were managerial-related characteristics. Evidence provided by recent research supports the idea that individuals who possess both technical and management knowledge and skills lead successful projects. Moreover, leadership skills were added to technical and management because it is internally consonant with the motivation of the project team, and externally conformant with client focus strategies.

Similar to other functional strategies, the project stakeholder management strategy framework (Clarkson, 1995; Hubbard & Bolles, 2015) is a structured form of the directorate that is purposed to accomplish vision successfully, business goals, objectives, and tasks within a scoped schedule, agreed budget, and well-defined quality. In this framework, the essence of project management is to support the execution of an organization's competitive strategy to deliver the desired outcome (i.e., fast time-to-market, high quality, low-cost products) (Milosevic, 2003). This view defines an organization as the process rather than the traditional functional or matrix form and describes project management as one of the key business processes that enable companies to implement value delivery systems. Therefore, when organizations link their projects to their business strategy, they are better able to accomplish their organizational goals.

Herein, we do not differentiate between 'critical success factors for projects' and 'critical factors for project success, ' and we view them as meaning the same. However, it is important to frame our definition of 'critical success factors' as we view it in our context. But what can be defined of critical success factors for projects in different organizational concepts? Without venturing into this debate (which would be outside the scope of this article), since there is no consensus as to what constitutes "project success" or "project failure" Ika (2009) defining "critical success factors" therefore becomes dubious. Many variations to the definition of parts of project management factors, such as Ika (2009) who identifies CSFs of project management, while Jugdev & Müller (2005) focus their definition of success in terms of the project manager and his/her effective leadership style, competence, and alignment with organizational strategic objectives.

Many other authors and practitioners deal with the definition of CSFs by addressing efficiency and effectiveness in project management and even treat them synonymously thereby confusing the discussion even further. In the classical view, time/cost/quality "iron triangle" was sufficient as a traditional definition of critical success factors for projects and project management (Westerveld, 2003), but it does not seem so anymore today. Scanning the literature, we select from the many definitions and variations thereof, a few definitions, which we (for exploratory purposes) analyze critically, as follows:

1. Alias et al. (2014): CSFs are **inputs** to project management practice, which can lead directly, or indirectly to **project success**.
2. Milosevic & Patanakul (2005): CSFs are characteristics, conditions, or **variables** that can have a significant impact on the **success** of the **project** when properly sustained, maintained, or managed.
3. Kumaraswamy et al. (2005): CSFs are viewed as those **approaches**, activities and practice that should be addressed in order to ensure **effective** management of relationships among key parties, and to achieve integrated teams.
4. Esteves and Pastor (2001): CSFs as the limited number of **areas** in which results, if **satisfactory**, will ensure a **successful** competitive behavior for the organizations.

These definitions have one thing in common, namely the identification of 'variables' that lead to project 'success.' As definitions change, these words are replaced with other words. Moreover, with different definitions, these words are qualified to present intended meaning.

Nevertheless, having initiated 77 projects and following up on their progress over 3 years, in a U.N. context with growing interest in training, we observed that the framework of all projects is intra-organizational, involving engagement from all stakeholders (sometimes evident and other times not so obvious), with strong cultural differences (Leadership), language barrier (effective communication), political environment (commitment), and priority of interest (strategic objective). With that in mind we present our perspective on defining critical success factors for project/project management:

CSFs entail the treatment of challenges in a systematic and accountable way for the purpose of continuous positive change.

This definition not only captures the U.N. context but also is generic enough to be adaptable to any context. In the definition, we include

- 'challenges' that represent the triggers (may be at any organizational level: strategic, tactical, operational, such as efficiencies and/or building capacity) for project initiation,
- 'systematic' which specifies the need for structure, method, and logical in how to deal with the challenges (i.e. projects),
- 'accountable' to represent the idea of doing things responsibly and the ability to trace errors and adverse effects to their source, and
- 'continuous positive change', thereby indicating movement towards adaptation.

The above four keywords found in the definition account for all the project management subsystems: Challenges represent project initiation (in other words, identification of projects); Systematic represent the standards (PMI, PRINCE2®, SCRUM, etc…); Accountable represents the metrics necessary to monitor and control for the sake of finding sources of errors (errors being used loosely here); and Continuous Positive Change represents adaptation and includes all terms such as sustainability, competitive advantage, growth, etc.. The notion of change accounts for what can be considered successful or not within the context boundaries and constraints.

THEORY & HYPOTHESIS

Our research hypotheses related to critical success factors in project management and certification/training and which serve our study context are based on the following three articles: Pinto and Prescott (1988), Hyvari (2006) and Starkweather and Stevenson (2011). The combination of these articles provides us with the framework to address the factors of interest at the project level (operational) (Pinto & Slevin, 1987), at the organizational level (addressing the vertical structure of organization) (Hyvari, 2006), and at the certification and training levels (Starkweather, & Stevenson, 2011).

Consequently, this study examines the success factors of project management in the United Nations type of organizations who are presently engaged in the process of integration of the project management approach to bridge a significant gap between the business owners (internal

and external with business needs such as increased efficiencies, product development, etc…) and the information communication technology professionals, to enhance the levels of project success.

Putting the latter three CSFs perspectives (project management, organizational structure, and certification/training) into focus, we find that the research community continues to study Pinto and Prescott (1988) assessment of the complexities of the project implementation process and stress that these complicated are complicated further by the project's dynamic and changing nature. It is accepted now that this may be the result of the on-going confusion regarding the assessment of critical success factors in projects. Our combined decade experience in the context of the United Nations, we have observed that is the case where the impact of the critical factors for project success can even change over the duration of the project itself.

From an organizational perspective, the United Nations organizations are complex due to their international (and therefore culturally diverse) nature. Whether projects are internal or external, they all provide, to various degrees, socio-economic assistance to the developing countries or beneficiary groups. These projects differ from industrial and commercial projects in several ways, and understanding the factors of successful project management and which of them have strong impacts on how to manage and evaluate projects is of vital importance (Khang & Moe, 2008).

The proliferation of the project management approach throughout all sectors as well as the increasing trend in academia, have produced numerous perspectives and frameworks to study the nature of project management. Most important of all is the notion of certifications that promises a certain knowledge gain of the project manager to lead projects successfully. The certification process assumes that some learning (explicit) does occur in addition to experience (tacit – which may also be represented by the CSFs). The link between explicit and tacit knowledge gained by an individual for project management is well treated in Starkweather and Stevenson (2011).

Therefore, based on the above, it seems that there is still relatively little research on dependencies between organization context, critical success factors, and certification/training of project management. None were found to address that subject in the U.N. context. It is for purposes

such as this in mind that we selected the above-mentioned studies to adapt the significance of certification and training in our methodology. Therefore, the following hypotheses will be tested:

Hypothesis 1: Project Management certification credential will be significantly correlated with Critical Success Factors of project management.

Hypothesis 2: Project Management training will be significantly correlated with Critical Success Factors of project management.

Hypotheses 1 and 2 investigate the impact of certification and training of the project management approach on project success respectively. The derivative hypothesis stated above is based on the results from previous studies that certification training does indeed provide opportunities for staff's knowledge and skills enhancement and that, all other things being equal, these knowledge flows and competencies should result in higher rates of project success for project managers after received certification.

CONTEXT OF STUDY

The United Nation System

The United Nations (UN) system works in a variety of ways to promote economic and social development, combining normative, analytical and operational activities. It helps formulate policies and sets international norms and standards. It prepares studies, undertakes support and provides advice to governments. It mobilizes funds and carries out programmes for development. Development cooperation activities by the U.N. system represent a small but significant share of the total of official development assistance.

Development cooperation activities that usually occur at the operational level for and in the international arena constitute one of the primary types of work of the U.N. family. Through these the UN, its specialized agencies, its funds, and programmes, put into effect their mandates and capabilities in support of the policies and priorities of recipient countries (today they entail over 190 member-states). Each operates under the guidance of intergovernmental bodies, and they consider the outcomes and commitments of the relevant global conferences.

The way that the U.N. family is governed occurs through the General Assembly, which provides intergovernmental guidance on emerging issues and system-wide concerns through a triennial comprehensive policy review. As an input to the Secretary General's report to the Triennial Policy Review of Operational Activities, the Secretariat will evaluate feedback on performance and strategic direction.

Analysis and deliberations on the operational activities of the U.N. system are a focus on several main issues of mutual interest. These get brought to the attention of the General Assembly in reports and represent implementation by the regime of the policy guidance from these intergovernmental bodies.

The United Nation Organization (UNO)

The present study was conducted in one of the U.N. organizations, which we will refer herein by UNO. In 2009, realizing the limiting value of a silo culture, an integration initiative was undertaken. Subsequently, a set of projects were identified to align information communications technologies with the strategic goals and respond to two primary enterprise activities namely (1) transforming the organization from a manual-based organization into a modern electronic-based organization, and (2) breaking the silo culture and drive a new business functional model focused on collaboration, cooperation and coordination.

Based upon a collaborative planning process, which included all critical stakeholders, decisions from four IT management groups (Web management group, IT security management group, Content management group and Project management group), interviews with the Organization’s business focus points, consultations from external industry advisors, and assessment of business developments trends in Bureaus and at Regional Offices, the strategic IT direction of the Secretariat were conducted to meet the following strategic goals: to build capacity, to establish continuous organizational learning, to create an environment of knowledge management, to promote increasing collaboration and sharing, and to assure quality standards.

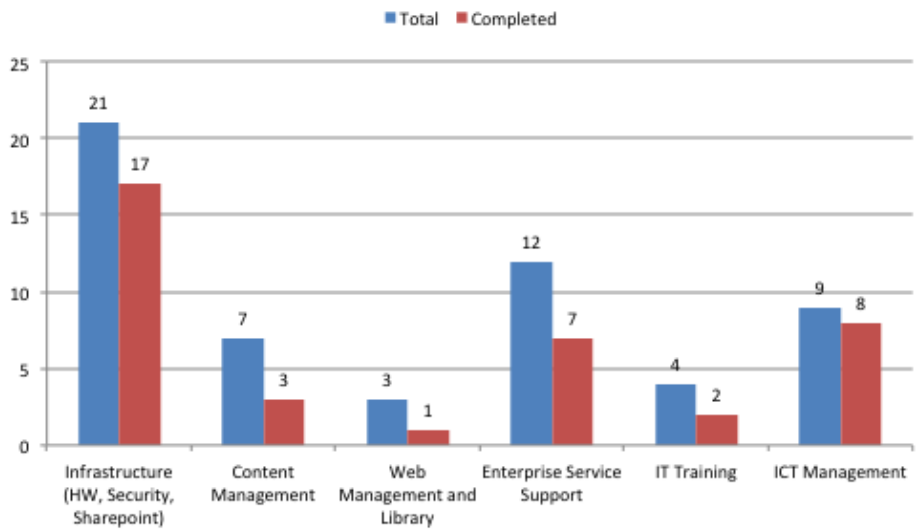
Since the launching of the IT strategy in 2010, significant progress in terms IT Changes has been made towards the realization of effective and efficient IT service development and delivery. IT has built a meaningful Infrastructure with implementations of the latest technologies in wireless,

messaging, web, storage, data, and virtualization services, and has successfully established the project management framework and procedures, and has reached some maturity levels of technological as well as managerial capabilities. However, the disparate development of IT systems has been neither effective nor cost-efficient. The absence of overall strategic management of IT investments and operations has largely contributed to the current gaps and deficiencies were marked in a 2012 Joint Inspection Unit report. IT units in the Organization are centralized in some fashion (e.g. budget), but fragmented in the others (e.g. IT resources and projects planning/development) that often operate in isolation from one another. In addition, strategic IT capabilities and availability of the Organization also significantly lag behind those of other U.N. organizations owing to systemic under-investment for Organization-wide purposes. As a result, the Organization has not been able to take full advantage of IT in a manner that enables the entire Organization to benefit from the opportunities that it offers.

To support the implementation of PRINCE2®, an organizational wide Project Management Committee ("PMC") was established in 2012 at UNO. The role of the PMC was to guide project teams with policies, procedures in the preparation and reviews of project documentation, and provide advice on project management and PRINCE2® best practices. Compared with some other project management methodologies such as PMP®, UNO adopted PRINCE2® because it is more prescriptive in its defined roles and responsibilities and more suitable for satisfying complex environments. From that perspective, management expected that the standardized definition of roles & responsibilities and governance considerably reduce churning behaviors, unproductive discussions, and arguments throughout the project life cycle. From the start of this initiative, there were a growing awareness and positive interest from the business areas as they became increasingly engaged in PRINCE2® methodology on not only IT related projects but also in the development of their areas of activities.

As part of the certification/training initiative and while different groups of employees were sent for certification/training, seventy-seven projects were initiated and assigned to the trained/certified project managers. I mention training in conjunction with certified because some employees did not pass the certification test. Around 75% of those sent for training were given certification at the end.

Figure 1. Projects initiated and completed.



I list some of the most important projects to provide an idea of their scale and type: Disaster Recovery II; Regional Office Infrastructure standardization; Global Service Desk Management System (24X6 supports); Voice Over IP; Electronic Conference System; Electronic Voting System; Offshore sites (China and Korea) infrastructure (VPN/DMZ); IT Risk Management; Identity and Authorization Management; IT Security Audit; ITIL/Change Control Management; Information Security Awareness programme; Enterprise Resource Planning (ERP) System Upgrade; Additional ERP Modules: eRecruiter, Travel, Absence; Enterprise Data Architecture (Business Intelligence Structure); Electronic Documents and Records Management System; eLearning Management System – Version 2.0; eLibrary; Customer Relationship Management System; and eCommerce System.

Figure 1 shows the project portfolio categorized into six areas: Infrastructure, content management, web management and library, enterprise service support, IT training and IT management.

The y-axis represents the number of projects, and for each category (distributed on the x-axis), two columns are presented where the left one gives the total projects, and the right one shows the number of the projects completed. The percent of projects completed with respect to the category is 80%, 42%, 33%, 58%, 50% and 89% respectively. Taking their average would provide an overall percent completed across all categories of 59%. However, if we consider the total

number of the project of 56 and those completed of 38, a total of 68% were completed. This simple performance metric has been observed in industrial and commercial organizations in the 70s. Today, organizations have improved significantly from this 65% completed project performance indicator. Today, the discussion is about the value of projects and not on completion of the project on budget and on time. This shift in project management perspective has not occurred yet in the UNO.

METHOD & DATA COLLECTION

The Survey

Knowledge and results from previous qualitative, descriptive and case studies (Pinto & Slevin, 1987; Hyväri, 2006; Starkweather & Stevenson, 2011) were utilized as the basis to build our survey and data collection. The survey was constructed from the top 5 most ranked factors of each category from Hyvari's study along with 17 factors adopted from Starkweather and Stevenson (2011) and Pinto & Slevin (1987). All together we formulated a survey containing 42 questions (representing the CSFs of interest to our study, as shown in table 1 below). To test the validity of the survey shown in table 1, it was sent to five IT project managers from three departments who were asked to validate the questions on their clarity and relevance. They have been invited to identify which questions were unclear or irrelevant and have been invited to comment on the survey itself. Their responses were used to improve the final survey.

The survey was administered to 87 project managers engaged in one capacity or another in one or more of the 77 earlier mentioned projects. The participants' roles were primarily information communication technology executives, project managers, project team members, consultants, or hiring managers. They were asked to complete the survey, which utilized a 5-point Likert scale (5 being most important, 3 being irrelevant, and 1 being extremely unimportant) with questions that were placed under 4 categories: (1) Project, (2) Project Manager, (3) Project Team Members, and (4) Organization/Environment. As part of the survey, participants were also asked to rank the relative importance of each CSF. Moreover, the survey included questions that identified whether the participant is certified and/or trained in both PRINCE2 and PMP.

The survey was created in Microsoft Excel and administered via email. Participants were asked to complete the survey digitally within two weeks and email their Excel file with their

responses back. All participants returned the survey. This 100% response rate can be attributed to the desire to give feedback on the certification and training initiative since this initiative was relatively new and the last batch of training was only one year earlier. There was a high demand for employees to take the training because they felt that this would enhance their curriculum vitae and chances for promotions and professional success within the organization. At that time, all were keen to apply the PRINCE2 methodology as well. Needless to say, there was hype around this initiative. Another reason for the high demand for enrollment to the PRINCE2 training initiative was the change of day-to-day pace at work.

Once all the surveys were returned, they were then imported into SPSS statistical software, cleaned, transformed and prepared for analysis. Table 1 shows the questions and instructions given to the project managers. The answers that were entered by the participants were in the mixed format: 1 to 5, YES, NO, and the variations of importance scale. Therefore, all the answers had to be encoded for uniformity. For example, YES was assigned 1, and NO was assigned 2. Analysis of the data started after that all the answers were made uniform across the entire data set. The analytical strategy is elaborated next.

Table 1. Survey data in the study.

	Trained (Y/N)	Certified (Y/N)
PRINCE2	Y	Y
PMP	N	N
Critical Factors of Project Success	Select ONLY top 3 most important factors from each category	On each factor rank (1 to 5) 5: extremely important 4: important 3: fair 2: less important 1: not important
Success Factors related to Project Manager		
1. Ability to communicate at multiple levels	Yes	4
2. Ability to deal with ambiguity and change		3
3. Ability to escalate		3

4. Working Attitude		3
5. Cultural fit		3
6. Education		3
7. Effective Leadership		3
8. Length of prior engagements		3
9. Past team size managed		3
10. PMP or PRINCE2 certification credential		3
11. PMP or PRINCE2 trained		3
12. Technical knowledge and hands-on experience	Yes	5
13. Work history		3
14. Effective verbal communication		3
15. Written skills		3
16. Commitment to the project	Yes	5
17. Ability to coordinate		3
18. Situational management		3
19. Competence		3
Success Factors related to Project		
20. Have a clear boundary		3
21. End-user commitment	Yes	5
22. Adequate funds/resources	Yes	4
23. Project realistic schedule/time		3
24. Clear goals/objectives	Yes	5
25. Project mission		3
Success Factors related to Project team members		
26. Technical background/Technical Task	Yes	3
27. Communication/client consultation	Yes	5
28. Effective monitoring and feedback		2
29. Commitment to project	Yes	5
30. Troubleshooting		2
31. Personnel		2
Success Factors related to organization		
32. Effective project executive board	Yes	4
33. Clear job description		3

34. Top management support	Yes	5
35. Project organization structure		3
36. Functional/Operational manager support	Yes	4
37. Political environment		3
38. Social environment		3
39. Technological environment		3
40. Economic environment		3
41. Client acceptance		3
42. Subcontractors		3

Analytical Strategy

Our goal of this study as indicated in the 'theory and hypothesis' section is to test two hypotheses. This can be done in two ways, either (1) by conducting correlation analysis between the 42 questions and the certification/training data or (2) by consolidating the answers of the respondents to identify the CSF in context (which entails comparing them to the results from their source) and then perform correlation analysis on that final CSF set. I selected the latter approach because the context of the U.N. is of primary importance of this study. In other words, we prefer the context-centric approach to the data-centric approach of analysis. I feel that this would provide a more meaningful explanation of not only how the U.N. is different from industry/commercial sector, but also provide us with the most significant factors that executives can act on. To that effect our analytical strategy entailed the following steps:

1. Identify the top ranked critical success factors,
2. Compare the resulting CSFs to
    a. Pinto & Slevin, (1987)
    b. Hyvari, (2006) and
    c. Starkweather & Stevenson, (2011)
3. Perform correlation analysis for hypothesis testing.

Results & Analysis

As mentioned earlier and shown in table 2 below, they CSFs are grouped into four categories: Project, Project Manager, Project Members and Organization/Environment. Respondents were first

asked to select the three factors in each group that they considered to be the most critical to successful project management as they have observed from other projects and project managers and as they have experienced with the projects they were assigned to (from the 77 projects described earlier). The results of the rankings are shown in Table 2. A set of unique sixteen critical success factors from the total of 42 were reported. They are in bold and numbered from 1 to 16 in the table as follows.

Table 2. Critical success factors as ranked in the study.

Category 1. Success Factors related to Project Manager
1. Ability to communicate at multiple levels
Ability to deal with ambiguity and change
Ability to escalate
Working Attitude
Cultural fit
Education
2. Effective Leadership
Length of prior engagements
Past team size managed
PMP or PRINCE2 certification credential
PMP or PRINCE2 trained
Technical knowledge and hands-on experience
Work history
Effective verbal communication
Written skills
Commitment to the project
3. Ability to coordinate
Situational management
Competence
Category 2. Success Factors related to Project
Have a clear boundary
4. End-user commitment **5. Adequate funds/resources** **6. Project realistic schedule/time** **7. Clear goals/objectives**
Project mission
Category 3. Success Factors related to Project team members
8. Technical background/Technical Task **9. Communication/client consultation**
Effective monitoring and feedback
10. Commitment to project
Troubleshooting

Personnel
Category 4. Success Factors related to organization
11. Effective project executive board **12. Clear job description** **13. Top management support** **14. Project organization structure** **15. Functional/Operational manager support**
Political environment
Social environment
Technological environment
Economic environment
16. Client acceptance
Subcontractors

The ranking of the CFSs was done according to the frequency of responses. As a first step, Cronbach's alpha was run to determine the reliability of these 16 items as a valid measure of this study (Cronbach's alpha = 0.867), which indicated a significant and persuasive evidence of correlation among items. Thus, all these 16 items were retained.

Next, we compared the results of our study with those of Pinto and Slevin, (1988), Hyvari, (2006), and Starkweather and Stevenson, (2011).

Comparison with Pinto and Slevin (1988)…

I compared our results with the Project Implementation Profile method (PIP). As can be observed in table 3, our study ranking results of 'importance of CSFs' show that top management support, ability to communicate at multi levels, effective monitoring and feedback, and project realistic schedule and time as the most important. Table 7 provides the results in increasing importance as found in our study. Results of this study and those of Finch (2003) and Hyväri (2006) do not differ from each other as much as they differ from the studies of Delisle and Thomas (2002), Pinto and Slevin (1987) and Pinto and Prescott (1988), except in the Project mission, Communication/Client Consultation and Top Management Support.

Table 3. Comparison with Pinto and Slevin (1987).

	This Study	Pinto & Slevin (1987)
Project mission	10	1
Personnel	9	5

Troubleshooting	8	10
Technical background/Technical Task	7	6
Communication/client consultation	6	4
Client acceptance	5	7
Project realistic schedule/time	4	3
Effective monitoring and feedback	3	8
Ability to communicate at multiple levels	2	9
Top management support	1	2

Table 3 shows that the most important difference is found in the Project Mission. Our study ranked it last, while Pinto and Slevin (1987) reported this factor to be the most important. Project mission was also found to be of less importance in Delisle and Thomas (2002), and Pinto and Prescott (1988) as well as in Hyvari (2006) and Finch (2003) however not to the extent found in our study. Top management support, project realistic schedule and time, effective monitoring and feedback and ability to communicate at multiple levels are also found to be more important in our study – context of UNO. On the other hand, participants in our study reported that communication and client consultation to be of less importance than those reported in the other studies.

In addition to different respondents and research periods (Pinto & Slevin, (1987) results being based on survey data from the 1980s), one plausible explanation to those differences can be attributed to different project types and project categories, confounding variables, i.e. project, project management, project team members and project organization/environment. In previous studies, researchers may have aggregated all different categories' factors directly. This may be manifested in their statistics of internal consistency such Cronbach's alpha of 0.565, found in Pinto and Slevin, (1987) which indicate that the measure of acceptable internal reliability among variables is weak and therefore not acceptable. Similarly, we continue our analysis of the results to compare with Hyväri (2006).

Comparison with Hyväri (2006)…

Looking at table 3, the four-reported critical project-related factors (clear goals/objectives, end-user commitment, realistic schedule/time and adequate funds/resources) reported in our study are the same findings as in Hyväri (2006). The reported critical project-manager related factors (ability to communicate at multi levels, capacity to coordinate and effective leadership) were found to be

different from Hyväri's results where commitment to the project is more critical than to communicate at multiple levels. These differences are interesting and can be attributed to the relatively more complex U.N. political environment; nevertheless, this reveals the critical finding that all seven factors were managerial in nature. In the factors related to Project Members category, all factors have the same order as that in Hyväri's showing the findings consistency for this category.

Moreover, we performed an additional qualitative analysis comparing with the results from Hyväri's (2006) as shown in table 4. Table 4 places the critical factors into 4 different categories and uses the calculated percent frequencies in our study to compare with the top three rated factors in each category from Hyvari (2006) study for interpretation. A reliability check on our data was done and showed an acceptable Cronbach's alpha value of 0.911.

Table 4. Comparing results with Hyvari (2006).

This Study		Hyvari (2006) Study	
Success Factors related to Project Manager/Leadership		Success Factors related to Project Manager/Leadership	R
Ability to communicate at multiple levels	52%	Ability to communicate at multiple levels	
Ability to deal with ambiguity and change	27%	Ability to deal with ambiguity and change	
Ability to escalate	5%	Ability to escalate	
Working Attitude	11%	Working Attitude	
Cultural fit	0%	Cultural fit	
Education	5%	Education	
Effective Leadership	41%	Effective Leadership	3
Length of prior engagements	0%	Length of prior engagements	
Past team size managed	0%	Past team size managed	
PMP or PRINCE2 certification credential	0%	PMP or PRINCE2 certification credential	
PMP or PRINCE2 trained	6%	PMP or PRINCE2 trained	
Technical knowledge and hands-on experience	33%	Technical knowledge and hands-on experience	
Work history	2%	Work history	
Effective verbal communication	8%	Effective verbal communication	
Written skills	5%	Written skills	

Commitment to the project	26%	Commitment to the project	1
Ability to coordinate	48%	Ability to coordinate	2
Situational management	2%	Situational management	
Competence	30%	Competence	
Success Factors related to Project		Success Factors related to Project	
Have a clear boundary	20%	Have a clear boundary	
End-user commitment	62%	End-user commitment	2
Adequate funds/resources	53%	Adequate funds/resources	3
Project realistic schedule/time	53%	Project realistic schedule/time	
Clear goals/objectives	88%	Clear goals/objectives	1
Project mission	21%	Project mission	
Success Factors related to Project team members		Success Factors related to Project team members	
Technical background/Technical Task	62%	Technical background/Technical Task	3
Communication/client consultation	62%	Communication/client consultation	2
Effective monitoring and feedback	56%	Effective monitoring and feedback	
Commitment to project	73%	Commitment to project	1
Troubleshooting	21%	Troubleshooting	
Personnel	21%	Personnel	
Success Factors related to organization		Success Factors related to organization	
Effective project executive board	36%	Effective project executive board	
Clear job description	24%	Clear job description	2
Top management support	68%	Top management support	1
Project organization structure	27%	Project organization structure	3
Functional/Operational manager support	47%	Functional/Operational manager support	
Political environment	9%	Political environment	
Social environment	8%	Social environment	
Technological environment	11%	Technological environment	2
Economic environment	8%	Economic environment	
Client acceptance	55%	Client acceptance	1
Subcontractors	8%	Subcontractors	3

R: Ranking

Table 4 reveals that cultural lit, Length of prior engagements, past team size managed, project management certification credential and project management training are perceived to be the least

impactful factors linked to successful project management. I further consolidated table 4 to include only the top three ranked factors by Hyvari (2006), and we present the results in table 5.

Table 5. Ranking of critical success factors.

	Study	Hyvari (2006)	A
Project Manager/Leadership	Ranking		
Commitment to the project	*	1	No
Ability to coordinate	2	2	Yes
Effective Leadership	3	3	Yes
Project			
Clear goals/objectives	1	1	Yes
End-user commitment	2	2	Yes
Adequate funds/resources	3	3	Yes
Project team members			
Commitment to project	1	1	Yes
Technical background/Technical Task	2	2	Yes
Communication/client consultation	2	3	Partial
Organization			
Top management support	1	1	Yes
Clear job description	*	2	No
Technological environment	*	2	No
Project organization structure	*	3	No

A: Agreement

Table 5 confirms that in the context of this study, 8 factors were found to be in common, one factor (communication/client consultation) is partial agreed to be a critical success factor but ranked differently, and 4 factors were not found to be critical.

Comparison with Starkweather and Stevenson's on PMP certification…

While there was an indication, contrary to Starkweather and Stevenson (2011), a preference of technical skills over most soft skills except communication was found. This indicated that UNO's project managers felt that they required possessing high technical skills in their project management environment. Without many surprises, we found that UNO executives and project managers viewed certification as irrelevant at around 30 % or important at about 26%, and only 29% of the participants consider it is important or extremely important for project managers.

In an effort to isolate a core set of competencies that were deemed most important, the categories of "important" and "extremely important" were aggregated and then ranked by frequency of response and compared the differences in table 6.

Table 6. Critical success factors comparison with Starweather and Stevenson, (2011).

This Study		Starkweather & Stevenson (2011)		D
Ability to communicate at multiple levels	86%	Ability to communicate at multiple levels	94%	-7%
Technical knowledge and hands-on experience	79%	Technical knowledge and hands-on experience	46%	33%
Ability to deal with ambiguity and change	76%	Ability to deal with ambiguity and change	83%	-7%
Effective Leadership	74%	Effective Leadership	95%	-21%
Effective verbal communication	73%			
Working Attitude	71%	Working Attitude	85%	-13%
Written skills	53%	Written skills	87%	-34%
Work history	44%	Work history	69%	-25%
Ability to escalate	42%	Ability to escalate	66%	-24%
PMP or PRINCE2 trained	38%	Effective verbal communication	87%	
Education	38%	Education	38%	0%
Cultural fit	36%	Cultural fit	57%	-21%
PMP or PRINCE2 certified	29%	PMP certification credential	15%	50%
Length of prior engagements	21%	Length of prior engagements	23%	-2%
Past team size managed	18%	Past team size managed	18%	0%

Our study results are similar to those of Starkweather and Stevenson (2011) in terms of the ordering in the importance of the factors. If we consider adding Project Management training into the study, results show that in the context of UNO, a person with project management training is more important than someone who is simply certified.

Table 6 reveals numerous interesting interpretations that can be attributed to the differences in the study contexts. The last column to the right presents the differences between the factor results of the two studies. A negative percent value indicates a higher score found in Starkweather and Stevenson (2011) study and vice versa. The largest disagreements are found regarding technical knowledge and hands-on experience (33% = that much more important in the U.N. context), and written skills (-34% = that much less valuable in the U.N. context). Most importantly, the importance of certification is more valued in the U.N. context by about twice as that in industry. This is interesting and may be contradictory when compared to other factors, but it does make sense due to the strongly hierarchical nature of the U.N. context, where credentials play a significant role in employee career.

Testing of Hypothesis

Our final set of analysis was to perform correlations between the critical success factors related to the value of certification and/or training. Three factors were selected for correlation with certification and training. These factors are Effective leadership (a7), Ability to coordinate (a17), and Ability to communicate at multiple levels (a1). Since certification and training directly relate to the project manager (PM) (and is of significance in terms of explicit knowledge gained), the most critical factors from the project manager category were selected as indicated in table 1. Two of the factors were also supported in Starkweather and Stevenson (2011) study.

Therefore, correlation results of the three factors with the certification factors, PMP or PRINCE2 certification credentials (a10), and PMP or PRINCE2 trained (a11) are shown in table 7. Table 7 shows that PM certification (a10) is not significantly related to any one of the other factors (a7, a1, a17). On the other hand, all factors are highly correlated with PM Training (a11 – row 2 shaded). Based on these results, we can infer that H1 is not supported while H2 is strongly supported.

Table 7. Correlation analysis – Project management certification.

Pearson Correlation	A10	A7	A1	A17
A10	1	0.192	-0.001	0.084
		(0.062)	(0.498)	(0.250)

A11	1	0.287* (0.010)	0.497*** (0.000)	0.384*** (0.001)
A7		1	0.494*** (0.000)	0.497*** (0.000)
A1			1	0.384*** (0.001)
A17				1

Last but not least, both findings point out that management in UNO seems to have little concern of Cultural Fit, Length of Prior Engagements, Past Team Size Managed, and PM Certification Credential as a critical success factor to organizational project management.

Discussion & concluding remarks

This article presented the results of a study that had two primary aims: (1) To validation of project management critical success factors to the context of the United Nations; and (2) To investigate the influence of certification and training on those most important and relevant critical success factors, and which were from the project manager perspective. The first basic analysis of the results revealed that that close to 40% of the CSFs previously studied do not apply to the United Nations context.

Our results stress the school of thought that attributes project manager related factors as the most important to support the notion of successful projects. These so called successful projects are led by individuals who possess not only a strong blend of technical and management knowledge/skills but also leadership and communications qualities. Moreover, it seems that U.N. organizational setup entailing job roles, project structure, and IT infrastructure is perceived to be less important for project managers to do their job effectively and efficiently. As a result, it seems logical that certification, which is aligned to the U.N. organizational requirement for promotion and image, does not correlate with the critical success factors for project management. However, more interesting is the perception that training, which relates to tacit as well as explicit knowledge of the project management subject matter, is perceived to be very important and is supported by strong correlations with critical success factors.

At the end of our analysis, we carried out a discussion with a group of the participants on the findings. It was expressed that talent of, and experience in, project management makes a project succeed or fail. It was felt that the total work experience of project managers was strongly related to the project factor, "end-user commitment," with the relationship becoming even stronger with longer experience. Younger project managers seem to need clearer project management goals and job descriptions than senior project managers do. In terms of the PIP, we noticed that Top Management Support was ranked the highest. The relationships with project success factors and organizational background variables were also found to be Top management support, communication, and effective monitoring and feedback. These findings support the PIP study findings.

Overall, the results of this study suggest the need for further research into the role of project manager leadership and his/her effective communication. Further studies into the knowledge and information management, as it relates to projects, may provide a potential avenue for enhancing effective communication. As the results indicate, and in the context of UN, project management training and not certification might be necessary and sufficient to support success as a core competency to critical factors for project management. The implications of this finding entail cultural change, project management institutionalization, and succession planning. In other words, if professionals who are trained (certified or not does not make a difference) are rewarded for practicing best project management standards as institutionalized and accepted in the organization, and incentives are given to continue, then that could be a sustainable solution to maintain and sustain organizational best practices in project management. Although project management has a fixed duration of each project, its practice became part of the operation and tied into certain initiatives such as performance management.

Nonetheless, our findings contribute to the body of knowledge in that it demonstrates that these efforts (reflected in the CSFs) still, may not be sufficient (Starkweather & Stevenson, 2011) to make project management certification one of organizational core competencies. It seems that some project failure may result from managerial neglect, short in soft skills, or lack of planning; but as the evidence suggests, sometimes even well-managed projects could miss meeting their strategic business objectives, and sometimes, even poor planning may not necessarily lead to a

project's failure. This was also experienced in the UNO as expected by the success rate of projects of around 50% only. To that effect, we consider and elaborate on the following two recent cases:

Case 1: Short-sighted in the Vision and Business Planning

The enterprise resources planning (ERP) implementation project was a $10 million project aimed to provide wide organizational connectivity and integrated services virtually anywhere around the clock globally across all regional office and headquarters. The project manager carefully planned and managed the project which was in fact completely endorsed by Council and Senior Management Group. The project manager was a PRINCE2 certified practitioner and had over 10 years of project management experience. The selection of the solution was made without end-user nor senior management involvement. The ERP was implemented and deployed. But the outcome was hardly considered acceptable.

After its deployment, the ERP turned out to be a problem to all stakeholders where some have even gone as far to call it a nightmare. From the case, there was clear indication of the lack of alignment of the project with the business needs and its disconnect from the organizational strategy (future business objectives, technologies, and environmental trends). The project manager was able to deploy few of the ERP modules, primarily the financial module, and forced its utilization by some initial users. As time passed by, more users were forced (and we use the word forced loosely here) to use it. Five years after its deployment, we interviewed 10 key end-users who gave the same feedback, namely that the system was not easy to use and the implementation was abrupt with no time to adjust. A disturbing fact that is worth mentioning at this point is that when we interviewed the project manager to share with him the feedback, his response was to the effect that the end-users were not smart and the ERP was simple and well implemented.

Nevertheless, this resulted in a ‘technical hijacking scenario’ by the vendor that the project manager had hired for the implementation. To mitigate this scenario, the UNO had to invest an additional 10-million and 5 more years to fix errors and upgrade the system to meet the strategic alignment goals. The project manager, in fact, had created a timeless project thereby securing his job till retirement – so to speak.

Case 2: Lack of the Team Leadership and Effective Communications on Strategic Decisions

UNO's initiative to engage in extra-budgetary activities (EBA), which was by design instituted as a "cost recovery" project to bridge the financial deficit in the regularly funded program was driven to the point of not meeting its goals and failure to achieve its strategic promise globally to member-states.

The project was initially well vetted by extensive market research. The project initiation document was endorsed by senior management and council. However, due to lack of team leadership and soft communication and personality skills, the project manager (also PRINCE2 certified), eventually (after 7 years) brought the EBA to the brink of failure defined as not meeting its financial goals. This EBA had an impact on 104 employees and a number of regulatory activities that are core to the UNO mandate. This under-performance caused a serious risk that would undermine the agency's commitment (and image) to member-states.

In fact, the project manager was changed, and with changing environmental conditions such as the US currency acted in favor of this near financial goal miss, and the organization's image and the fate of 104 employees were saved.

Implications for researchers and practitioners

This research is significant for both researchers and practitioners because it has the potential to shed light on CSFs in U.N. type of organizations that by virtue of their nature operate in a highly political environment that also effect the operational levels and consequently projects. This research also contributes to the overall understanding of CSFs research and the notion of success in the United Nations system.

More specifically, this study can be particularly of value to project coordinators and project supervisors, in that its findings can be utilized to manage projects and project portfolio within the complex nature of the U.N. and specifically help them find ways to bridge political and strategic intentions with project completion and success.

I acknowledge the limitations of this study. Our focus on UNO limits the generalizability of the results. Results are limited to a small sample size. I suggest that our approach herein should be

expanded to other U.N. agencies to increase the scale and coverage. With at least 10 more U.N. agencies with a minimum sample size of 250, the reliability of the construct studied can be enhanced. At the same time, more insight can be extracted.

Another limitation of the study and experimental design relates to the definition of project success, which could be extended from its usual treatment of "Outputs," to include "Outcomes" and program "Results." This is particularly the case today with the concept of a 'product' in the U.N. context influencing a trend towards Performance Management (Result-based Management), which in turn, is impacting on Transformation (Change) Management implementation. In light of using U.N. organization as the environment of study, researchers should put efforts on identifying and incorporating the multicultural, political and environment dimensions into this study to better understand their influence on project success. It is worth noting that during the process of data collection interviews (structured, quasi-structured and unstructured) and maybe focus groups should be considered to ensure that all human factors are taken into account. Lastly, there is an emerging need for rapid development methods, and therefore IT executives should focus on exploring the notion of hybrid project management by integrating several methodologies such as PRINCE2 and agile/Dynamic Systems Development Method (DSDM).

Appendix E Published Research Articles

Proposing an Integrated Change Management model for the United Nations

Information Science Institute, I^{n}SITE Conference Paper, 2017

Investigating Critical Factors for Project Success and the Impact of Certification/Training – The United Nations Context, IGI Global Publication, 2017

Factors of Project Manager Success

IJIKM , Volume 10 , 2015

Factors of Project Manager Success

Information Science Institute, I^{n}SITE Conference Paper, 2015

Exploring Enterprise Architecture and Change Management

I^{n}SITE 2013 , Volume 13, 2013